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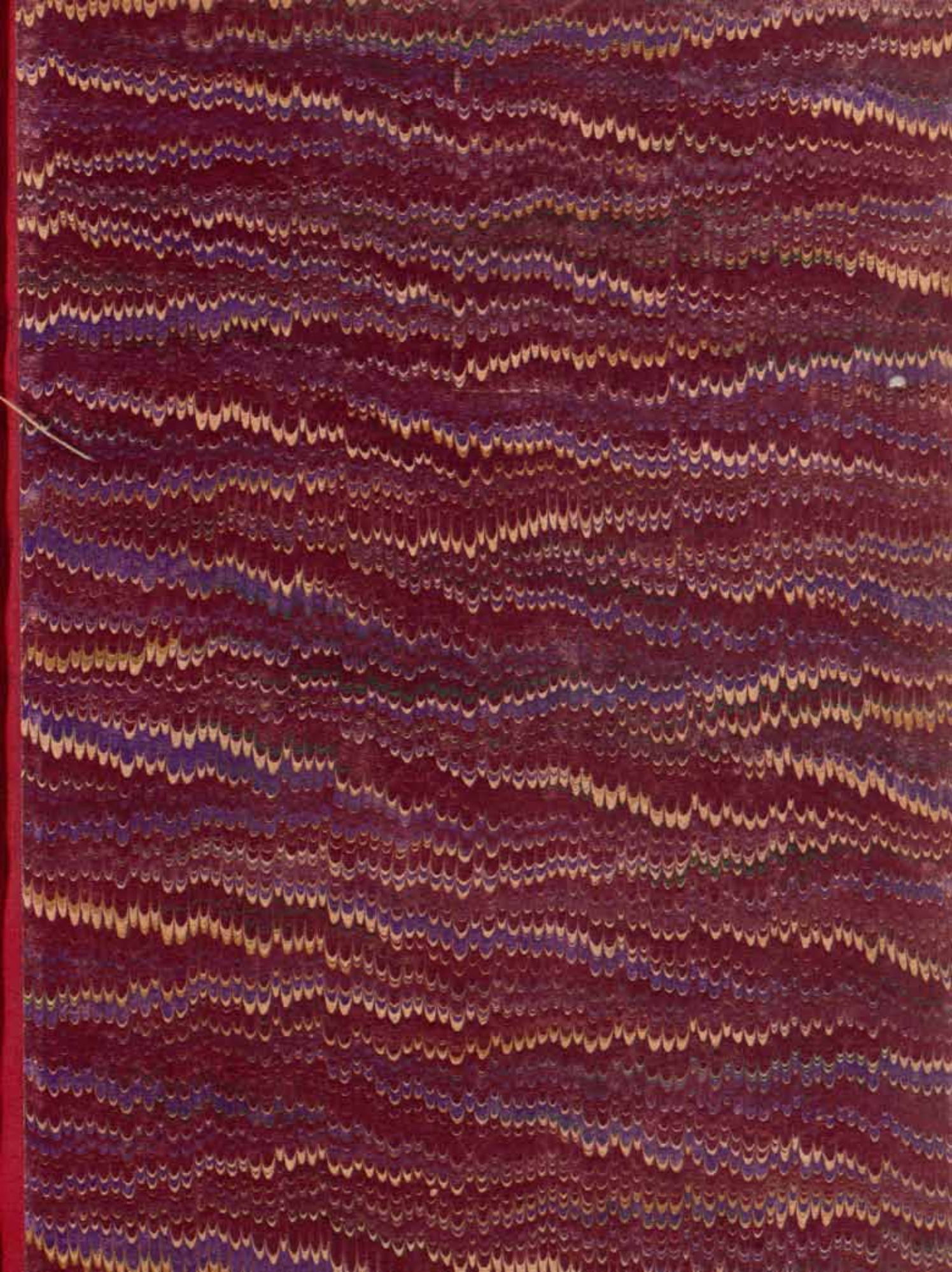
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TOTAL: VOLUMES, 38; PAMPHLETS, 2.

JOURNAL
OF
THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

Seventy-fifth Session—1909–1910.

THE OPENING MEETING, AND PRESENTATION OF THE ROYAL GOLD MEDAL 1909: ADDRESS by the PRESIDENT, Mr. ERNEST GEORGE, at the First General Meeting, Monday, 1st November 1909.

WE meet to-night at the opening of the Seventy-fifth Session of our Royal Institute. It has been the custom on such first nights for the President to make his oration, and you listened with courteous patience a year ago to my expression of sentiments and views about architecture and the concerns of our calling. My words to-night shal be few, for, happily, we have a more distinct interest in gathering here, perhaps overcrowding our room. Our numbers and our needs have outgrown the accommodation. It is a satisfaction to be able to state that after a few months we shall be suitably housed, spreading into the adjoining galleries that we have long coveted. The pictures, our precious possessions, which are now skied and which are deteriorating in the upper region of exhausted air, will be hung in a becoming light, doing justice to their distinguished painters and to our Past Presidents. Our collection will shortly be made richer by the fine portrait of our late President from the hands of Mr. Cope. We shall be able to receive our guests with comfort and propriety without the present struggle. Also we shall have room for the exhibition, under our own roof, of the Studentship drawings and of other collections that may be desirable from time to time.

In our Art we do not make history so rapidly that there is a new story to be told each year. Progress, I believe, is steadily making—the result of sound training in our schools and of a truer appreciation among ourselves of the principles of building and design. There is a growing desire for breadth and largeness of treatment, rather than for pretty detail and the trivialities that once interested architects and their public.

We must report l'Art Nouveau as already in a moribund state, and happily we have not been startled by a later invention. We are seldom asked now why architects do not originate a style. Those who have followed the history of the Art know that each style, seeming distinct, has been the result of growth, changes coming by degrees, sometimes by assimilation of foreign forms, as well as in variations of detail at the hands of the cunning craftsman who yet held to the traditions in which he moved.

Such changes have at times been accelerated, as when the influence of the revived Greek and Roman art spread through Northern Europe, and men of genius made new melodies on the old chords. Yet the giants of those days did not claim to have invented styles. To meet constantly changing requirements and to accept new methods of building, evolving new modes of treatment, will give vitality to modern work, which must not resuscitate old models. I give my humble opinion that the average work of architects now is better than it was even several

years back, one advantage being that there is less diversity and a more general acceptance of a common style. There is the desire to fall into line rather than for strong self-assertion. Forty years ago, if we had a street frontage to deal with, a first thought was "Shall it be Gothic or Classic?" Now the feeling is that it should harmonise with its surroundings; better than the latter if possible, but not with a clash or discord.

For the carrying out of our work we have in this country admirable builders, and I am glad to state my experience in this matter. We have also the British workman, who is often spoken of slightingly, and perhaps with justice when known only through the demagogues who are too often his mouthpiece. We have craftsmen and workmen equal to the best. For these to have any independence and strength it was found necessary to combine and form Unions, and these have been helpful in preserving the man's rights. We have, however, to lament the short-sighted policy of these Unions in suppressing the individuality and self-reliance of the man. The intelligent mechanic with skill and energy must receive no higher wage than the wastrel; he must not work an hour longer, nor must he do more work in the hour. He is robbed of all ambition and of the possibility of improving his status. Our politicians on both sides of the House avoid this home truth, and discuss other ways of making our workers compete with skilled and industrious toilers in other countries. They do not say that the law the man makes for himself stultifies him and excludes him from the labour market. These artificial conditions of labour have also made the housing of the working man almost impossibly costly.

The future of our art is in the hands of the young men now in our offices, or in the good Schools where a training is given much more thorough than could be had a generation ago. We are able to take stock of these future architects annually at the gathering of students' drawings in competition for our medals and prizes. The work shown last winter perhaps exceeded in quantity and quality the product of previous years. An effort is being made to give direction to the studies of those who go out with our awards, so that time may be spent to the best advantage among the great examples; precious time has sometimes been wasted in miscellaneous and objectless sketching for want of a defined purpose in travel.

One of the aims that we have before us is the founding of a British Architectural School of Rome, the presentation to which would be our highest academic prize, and I am glad to say that this scheme has ceased to be in the clouds. Time and thought have been given to the subject, and much information gathered. A special committee has struggled with the problem, and our able friend Mr. John W. Simpson has drawn up a practical working basis for our consideration.

It has further been proposed by Sir Brumwell Thomas that we should have a "Diploma School"—a school where architectural study would be carried further than in the ordinary course of training or apprenticeship, and on men from this higher grade our "Prix de Rome" might be conferred; this would be equivalent to a prize Fellowship, giving leisure for higher culture.

It has but lately been realised how important is the study of Civic Design and Town Planning. It does not fall to our lot in the old country to scheme new cities on noble lines. We have, nevertheless, most of us seen familiar places change their aspect by degrees, often with lamentable result. There is now a general desire that new quarters of the town and new streets shall not come haphazard and by accident, but shall be the result of forethought, and part of a comprehensive plan with consideration of possible future needs. Architectural effect is to be studied as well as convenience and economy.

These matters have been till now left to surveyors and engineers. The study of such important problems will in future be brought before our architectural students, and, by the generosity of Mr. Lever, the Liverpool University is the first to enjoy a professorial Chair for this special study.

A group of able men among our Institute members form a Committee for the elucidation of this subject, and we have had the advantage of addresses here and of essays in our JOURNAL and elsewhere giving the results of their research. This Committee is also considering the proposal to organise a Conference of those interested in the work of Town Planning.

We are glad to realise that something has been done to reform suburban life from its monotonous environment. "Port Sunlight" perhaps was the earliest effort to supersede the usual rows of machine-made workmen's dwellings by groups of cottages with character and individuality, these having their outlook on a garden or green instead of always on the street.

The Garden Suburb at Golder's Green, Hampstead, is another happy growth on somewhat similar lines. It has been laid out with skill and judgment, the several roads or vistas taking advantage of any points of interest in the view. Ugly "backs" are avoided, the cottages being made seemly all round. There are dwellings for workmen, also accommodation suited to clerks, while there are larger houses for those of larger means. The desire has been to avoid an unrelieved and dreary aggregation of one class.

Another oasis, in a district with no natural attraction, is formed by a gathering of suburban villas, built by Mr. Willett, to the north of Regent's Park. These are by various architects, and they are happily grouped in relation one to another; instead of fences their forecourts or front gardens are enclosed by neatly clipped yew hedges, outside which is a well-shorn grass margin to the road, and this is not harmed by traffic or the passer-by. Looking from these houses or at them the aspect is pleasant, with an air of the country and of Kate Greenaway. We wish every success to such speculative building.*

We have seen changes come, mostly for the better, in our own great city, while probably greater alterations must follow. Let us prepare for these.

Between the City and Southwark is to be a new "St. Paul's Bridge." This is a matter of vital interest, and we trust that with collective wisdom and good judgment we may have a fine architectural feature, with well-studied approaches. Is there any reason why a Thames bridge built now should have less dignity and propriety than London Bridge and Waterloo Bridge? Is there not a shoddy and commercial appearance about most of the later attempts to span the river—a lack of monumental fitness? The bridges of a great city are the features that most impress the mind and remain on the memory.

While speaking of the City I would refer to the Guildhall, with its record reaching back to the days of Henry IV. The interesting crypt and the masonry of the walls remain, but generations of pottering have left little else. Even the late front by Dance has been mutilated. To meet modern wants great changes and rearrangements are to be made shortly, and we trust the best advice and the best possible scheme will be secured for this work. There is also a minor project for building kitchens, &c., now, to the disfigurement of the building, without reference to the future scheme. We would beg the Corporation to defer this work until they have decided on a comprehensive plan. Such halls are of national—I might say international interest, considering their wide hospitality. Some of my friends here will remember how the Burgomaster of Vienna last year, at the Architectural Congress, feasted a thousand of us in the Great Hall of the Rathaus.

In England we get fewer opportunities for architecture on a grand scale than are afforded in other countries. With our Continental neighbours a provincial railway station is made an occasion for an architectural feature; with us we demand only a restricted amount of accommodation and of convenience. The work of a post office is carried on perhaps in half of a grocer's

* The President regrets that, in speaking of Garden Suburbs, he should have forgotten to mention the earliest effort in that direction, Bedford Park, which was started in the seventies with houses by Messrs. Norman Shaw, George Godwin, and E. J. May.

shop, while in a French town the Bureau de Postes would house its officials in a structure with some magnificence.

Just now interest is taken in a scheme for a Playhouse as a fitting memorial to our great dramatist. I hope this may be realised on a dignified scale.

It is strange that while music and musicians have encouraging support here we cannot have an Opera House adequate to our important city. It is not in us to emulate Paris with its Place de l'Opéra, where architects, sculptors, and painters have enjoyed a free hand. Here the State is not expected to help in embellishments of the capital. Great demands are made upon her just now, but the desire is rather that she should take a grandmotherly interest in our private and domestic affairs.

We must accept the fact that expenditure on Art and objects of beauty must generally be the result of private munificence, and it has been gratifying to see how large sums have been forthcoming when a picture has had to be secured for the nation. In time we may find architecture appreciated as one of the great factors influencing the lives of the people. The cost of five Old Masters (at the present artificially inflated state of the market) would provide a noble building in which Drama or the Muse should be housed, receiving tributes from Sculptor and Painter. I do not undervalue the great works of great men, but I do feel that they are sometimes secured at an exaggerated cost, while the cheapening process is applied to public buildings and works that might have an exalting influence. The latter are the common property of all and belong to the poorest among us; they are possessions which we all enjoy and which cannot be catalogued in the impending Domesday Book.

Many of you may feel, as I do, the call from time to time to go out to see something beautiful; perhaps, with a few days' leisure, to look upon the marble palaces and shrines of Venice. Entering St. Mark's we exult in the tenderness, the mystery, and the richness of that temple. As we see the poor crowding around, whose shoulders and knees have polished the stones, we may almost envy them having this constant possession. My argument is that fine architecture is the least selfish or "classy" of human products: it is for all sorts and conditions of men.

We often hear the complaint that architecture is not duly represented in the one small room allotted to it at Burlington House; but we are now, I hope, to be given our chance. We have proposed to the Council of the Royal Academy the arrangement in the winter months of an exhibition of Architecture and the contributory Arts. The Council has graciously entertained the idea of such a scheme for the winter of next year. It behoves us all to make strenuous efforts for a gathering of works and objects that shall interest the outside world in our Art. Besides perspective views, commonly seen, it is desired to have models, such portions of buildings as are portable, sculptured panels, decorative paintings, and, perhaps, metal gates or grilles, with detail drawings or photographs showing the relation of these works to their respective buildings.

The work of giving a higher organisation to the Profession of Architecture through the medium of the Royal Institute is making steady progress. Two and a half years ago we adopted a comprehensive policy by a unanimous vote. Step by step we are carrying out that policy. We have drawn up and obtained the Royal sanction to a new Charter. We have drawn up new By-laws after a minute and exhaustive discussion, and they are now awaiting the approval of the Privy Council. By the beginning of next year we hope to receive this approval, which will empower us to open the gates of the Institute for the space of one year for the admission of the large number of practising architects of good standing who are still unattached to our body. When that has been done with success we may claim that we represent practically the whole of the architectural profession in this country; we are then to ask Parliament for higher powers and a more secure position. It is our hope that the energies and the good-will of all will be united to carry through this policy to ultimate success.

THE ROYAL GOLD MEDAL 1909.

Presentation to Dr. Arthur John Evans, F.R.S.

While most of us [continued the President] are occupied with our personal aims and interests, seeking our own profit or advancement, with some consideration for the greatness of our Art, and perhaps equal consideration for the necessary daily bread, there is among us a small band of workers moving on a higher plane, men who have set themselves to increase the sum of human knowledge. Some of these are engrossed in science, discovering ameliorations to sickness and pain. Some are exploring the desert and the mountain, and charting unknown regions and increasing man's resources; while other brave men face the hardships of ice, storm, and starvation and fight their way to the Poles. All these explorers we delight to honour.

But to us the Poles have no professional attraction: we have no use for them: we shall not be called upon to house the surplus population in those regions. The inhabited world and a knowledge of past civilisations have for us a much deeper interest, and we owe a great debt to those keen sportsmen who have set themselves to discover the relics of past races, unearthing buried cities, their temples and palaces, deciphering records and showing us how men have lived and fought and built.

To such work our distinguished visitor, Dr. Arthur Evans, has devoted his mind, his time, and his means, with the splendid result of reclaiming from oblivion the long-hidden treasures of Crete.

It is our privilege periodically to recommend for his Majesty's approval a name for the distinction of the Royal Gold Medal. It is for one who by building, by writing, or by research has advanced the Art of Architecture. The first explorer to receive this mark of appreciation was the great pioneer of excavation, Sir Henry Layard, whose winged bulls, so prominent a feature in the British Museum, may be found some day to have relation to the Bulls of Knossos which Dr. Evans describes. At a later date we had the honour of conferring the Medal upon Dr. Schliemann, whose unflagging tenacity of purpose resulted in the discovery of Troy and of Mycenæ, with the tomb of Agamemnon.

It is my pleasant duty to-day, in your names, to present the King's Gold Medal to Dr. Arthur Evans, who, in discovering the Palace of Minos, has, it is no exaggeration to say, completely revolutionised our accepted ideas of the early civilisations surrounding the Mediterranean basin. He has converted myth into history and floating prehistoric tradition into established fact. He will tell us that Homer was not a Romancist but an Historian.

But, what is of paramount interest to us, he has shown that centuries before the Parthenon was thought of, indeed before the Greek nation came into being, there were architects at Knossos and in other parts of Crete building huge monuments and palaces showing consummate skill in construction and adaptation for the use of man in an advanced state of culture. In fact, Crete has been found actually to have played the part in ancient civilisation which tradition had claimed for it. With Dr. Evans among us to-night it is not for me to tell you of Crete; I will only ask him now to accept the Medal as a tribute of our high esteem.

Dr. ARTHUR EVANS, having been invested with the Medal, addressed the meeting as follows: Ladies and Gentlemen, I do not know how I can adequately acknowledge the very great honour that has been conferred upon me this evening, or your very kind sympathy. It is gratifying to feel that, distant as it is, the architecture of ancient Crete should be recognised by you as having a bearing on that of the modern world. On the other hand I feel that anything I have done towards lifting the veil that concealed that early civilisation could never have been achieved had it not been for the very powerful and devoted help that I have received from a band of fellow-workers; and I also feel that anything that the President has said to-night, and anything in your kind reception of myself, must really be shared by those who have shared the work in Crete with me. I refer to my

colleague and assistant Dr. Mackenzie; to Mr. Theodore Fyfe, who has done so much of the architectural work and the planning of the whole site, and who is a member of your Institute; and to my friend Mr. Christian Doll, who has also been of the very greatest assistance, who has planned in the most elaborate way and helped in the very difficult conservation of the great staircase, and collected materials for the reconstruction of that very important part of the palace, which I hope some day may be laid before the Institute. I know that from some points of view, from the point of view of mighty stone architecture such as you see in Greece or in the later world, this Minoan work with its large proportion of wood and stucco represents a more primitive stage; but one thing that has specially struck me in all this work is the extraordinary advance that had been already achieved in Crete a thousand years before the birth of architecture in classical Greece. It is not only the actual structure, not only the paintings on the walls, or the beautiful and architectonic decoration in the shape of the vases found in the rooms; it is the whole planning, the extraordinary way in which the details of the building, especially the domestic quarters, are grouped together; it is the extraordinary perfection of the sanitary arrangements and the water supply. One cannot help feeling that to have reached such a high pitch as is there seen, the architecture must have gone through many stages of which we have not the records, and which perhaps were formed of more perishable materials. I must also here take occasion to say how much my gratitude extends to all those connected with the work executed in the east of Crete by members of the British School at Athens, who have been in a somewhat more distant way my colleagues, and in a more particular degree to Dr. George Macmillan, Secretary of the Cretan Exploration Fund, without whose cordial and devoted collaboration we could never have obtained the sinews of war that enabled us to achieve the results that have been attained.

THE PALACE OF KNOSSOS AS A SANCTUARY.

Dr. Evans went on to give a description of the Palace of Knossos as a Sanctuary, treating especially of the "miniature frescoes" brought to light in the northern quarter of the building. His remarks were illustrated by a numerous series of lantern slides, showing plans and photographs of details of the remains, together with drawings of the frescoes partially restored and presented in the brilliant colours of the originals. Dr. Evans, it should be mentioned, has very kindly undertaken to prepare for the Institute a Paper bringing together the evidence accumulated throughout his excavations of the religious aspects of the Palace of Knossos. The Paper will be published with illustrations in an early issue of this JOURNAL.

In his lecture on Monday, Dr. Evans brought out that the Palace of Knossos was a sanctuary as much as a palace, and the Minoan Kings were also Priests. It was unlike other palaces, either of the ancient or modern world, in which the demands of cult might be satisfied with a single shrine or chapel. In some respects it might rather be compared to the Vatican, for it swarmed with shrines and halls for ritual functions. The evidence of a whole series of finds had now shown that the chief divinity of Minoan Crete was a Virgin Goddess akin to Rhea and the Asiatic Artemis, and the Kings of Knossos seem to have administered their realm as her high priests. Besides the pillars of her shrines, the aniconic image of the Goddess was the sacred double axe; and the wonderful painted sarcophagus discovered by the Italian Mission at Hagia Triada, near the southern coast of Crete, showed an actual scene of worship in which offerings were being made to a pair of these double-axe fetishes—rising from stepped pedestals. The double axe, as was well known, recurred at a later date among the kindred Carian population as the attribute of their Zeus, called, from its native name *labrys*, "Labrandeus," and the view put forth on philological grounds that the Cretan Labyrinth derived its name from a dialectic form of the same name was fully confirmed by the archæological evidence. The Palace of Knossos was before all things "the House of the Double Axe," and was thus the true Labyrinth of tradition.

The lecturer said that exception had been taken to his view that the double axe so constantly recurring on the palace blocks was anything but a mere mason's mark or had any religious signification. Certainly there were many masons' marks on the palace blocks besides the double axe. But in several cases it could be shown from their distribution that these had a distinct application to the character of individual parts of the building. Several of these marks in fact belonged to the current hieroglyphic system and possessed a recognised ideographic value. The double axe, for instance, could be shown to recur in what appeared to be official titles and coupled with the "palace" sign. It was far more numerously applied to the palace walls than any other sign, and marked the principal lines of wall and entrances, the grand staircase, and the most important reception hall. Its repeated recurrence, then, on the stone pillars rising in the centre of two small basement rooms might be taken to show that they possessed a special sanctity. This view had been doubted when Dr. Evans first put it forth, but the discovery of many other similar pillar rooms exhibiting evidence of religious usage has now put the matter beyond doubt. These "Pillar Rooms" were the "crypts" of Minoan sanctuaries. In the South-East House at Knossos the base of a sacred double axe was actually standing against such a pillar, which itself again was marked by the sacred symbol. Ritual vessels and bases of the same kind

were found both in the Palace and elsewhere, either within or in close association with such chambers.

The whole west wing of the Palace presented indications of its various halls and chambers having served religious purposes. Besides the central shrine of the Goddess, here represented in her nether-world aspect as holding serpents, it was now clear that the chambers contiguous to the Room of the Throne contained at least three small shrines, one of which had been wrongly supposed to be a kitchen. The throne itself and neighbouring benches seem rather to have belonged to a small consistory of the priest kings than to have been intended for any secular usage.

At the north-west angle of the Palace, near this, had existed another pillar shrine and an upper hall of a ceremonial nature, the wall-paintings fallen from which exhibit a columnar structure with pairs of double axes stuck into the capitals and with sacral horns above the stylobate. Other fragments of fresco from the same place showed votaries bearing gold and silver vessels, and others again related to the sports of the bull-ring, which themselves seem to have had a religious connexion. But the "miniature frescoes" derived from some sanctuary structure on an upper floor near the Northern "Piazza" gave the fullest impression of the religious functions of the Palace.

Dr. Evans described the methods by which two complete designs, each forming a separate panel, had been reconstructed from the fragmentary remains. One of these depicted crowds of spectators of both sexes looking on at a dance of gaily-dressed females in a court below, and a discovery made this season had supplied a welcome illustration of the character of the performance. From a tomb just excavated by him, near the "Royal tomb" already explored, and of the same interesting structure, he had obtained a gold signet ring with a finely engraved design, the lower part of which exhibited similar dancing female figures, parallel in attitude and arrangement to those of the fresco. But in this case, together with sacred emblems, a figure of the great Minoan Goddess appeared above in a reserved celestial space. The dance then was of a religious and orgiastic character, and in honour of a goddess who in a later Hellenic garb appears as Aphrodite Ariadne. The Court, with dancing votaries depicted on the fresco, which was obviously some part of the actual palace system, may be taken to represent the actual "Dancing-place of Ariadne," which Dædalos, according to the Homeric tradition, was said to have fashioned "in broad Knossos."

The other panel shows the same crowds of spectators thronging the courts and terraces of a building, the central feature of which is a small brilliantly coloured pillar shrine with a taller central compartment and two lower wings. It is probable that this may actually represent a shrine existing in the northern quarter of the Palace. Some curious evidence, to which attention was called, seemed to indicate that in the latest period of the remodelled Palace a pillar shrine of the same kind had stood in the part of the west wing, facing the Central Court, near the place where the repositories of the earlier shrine of the Snake Goddess had been discovered. On the face of a low stylobate bordering the Court in this quarter traces had appeared—made clearer by successive seasons' rains—of two pairs of column bases with an intervening blank space between them, where, according to the typical plan of the Minoan pillar shrine as shown on the fresco, the central cell would have risen. It was noteworthy, moreover, that in the inner space within one of these wings had been found a series of clay seal impressions showing the great Minoan Goddess on a height between two guardian lions with a small pillar shrine on one side. These sealings themselves naturally indicated the neighbourhood of a sanctuary, and what made the evidence still more suggestive was the appearance inside the central space between the pairs of column bases of a curious recess, in the bottom of which remains of a chest containing clay documents had been found. This recess in fact answered to the basement of the central cell. Putting two and two together, Dr. Evans had arrived at the conclusion that they had here the complete ground-plan of a small Minoan pillar shrine, the plan and elevation of which were now shown.

In conclusion Dr. Evans briefly called attention to further evidence tending to show that the processional frescoes of the corridor by the Royal Entrance also had a religious intention. In all probability they represented a votive scene analogous to that shown on the painted sarcophagus of Hagia Triada.

VOTE OF THANKS.

DR. GEORGE MACMILLAN: Mr. President, Ladies, and Gentlemen,—The very great honour has been conferred upon me to-night of being asked to propose a vote of thanks, as I understand, first to your President for his admirable Address, and also to Dr. Evans for the lecture which followed. I feel that this honour is due not in any way to myself, for I could not claim to speak as an expert on any of the subjects which have come before you, but to my official connection with several bodies—the Hellenic School, the Schools at Athens and Rome, and the Cretan Exploration Fund, which do concern themselves with these matters, and with which, I am happy to say, your Institute has long maintained most friendly relations. At this late hour, even if I were competent, it would be out of place to dwell in any detail upon the various points raised in your President's very interesting survey of the architectural progress of the year, and the various problems which still lie before you. There are, however, one or two points I may perhaps be allowed to touch upon which are of special interest to myself and to those

with whom I work in these matters. In the first place I was extremely glad to see the reference made to the proposed Architectural School at Rome. In your President's Address last year some allusion was made to that matter, and I am bound to say it caused a flutter in the minds of certain people connected with an existing School in Rome. It was suggested, as I understand, in this room, that it was high time that a British School should be founded in Rome. Some of us ventured to think that a British School already existed there. However, I am happy to say that since that time these little misunderstandings have to a great extent been cleared up. The members of the Committee of the British School of Archæology—though we do not by any means confine ourselves to archæology—have put themselves into communication with your Council and have met with exceedingly courteous treatment, and I have every reason to believe that, when your admirable scheme is carried out, our School may have some part in the ultimate result. In the meantime, in order to emphasise the fact that our Committee and your Institute are indeed working together, I may mention that we have invited—and your Council have allowed him to accept the office—your representative, Mr. John W. Simpson, to join our Committee. I have only to-night had a few words with him on the subject, and I am very glad to learn that he is shortly going to Rome, and that he has already had several interviews with the Director of our School on the subject. I have no doubt that in the end this movement will take shape and form which will satisfy everyone concerned. Before leaving that subject, I should like also to add that there is no one more deeply interested in this idea of bringing together the various institutions connected with the study of art in all its forms in Rome than the present British Ambassador, Sir Rennell Rodd, who is himself a member of the Committee of our existing School. There is, I think, only one other matter I need touch upon, and that in only very few words, that is, the work of our friend Dr. Arthur Evans, whom you have so signally, but I think so worthily, honoured to-night with this great distinction. None of those who have heard Dr. Evans to-night for the first time, and have not hitherto realised all that his work has meant, will fail to understand what the world of learning owes to his genius and determination during these last seven or eight years. It was indeed a brilliant piece of imagination which led Dr. Evans first of all to lay his hand upon this particular site, and to say that here, if anywhere, was to be found the site of the great Palace of Knossos. We all know that that prophecy came true in the most marvellous way immediately the altered conditions in Crete enabled him to tackle the site, and since then year by year more marvellous discoveries have come about. Even to-night, often as I have had the privilege of listening to Dr. Evans on this subject, we have heard yet a new aspect of this extremely rich theme, an aspect which I am sure must have enchained the interest of all who heard him. It must indeed have been evident to all of you, as it has been evident to those who have followed Dr. Evans's work from the beginning, that in him we have not only a scholar, a trained student, a patient explorer, but a man with real imagination, whose mind is all the time working on the results and trying to piece together the past and to bring it as it were in living form before our eyes.

MR. GEORGE HUBBARD, F.S.A. [*F.*]: I have extreme pleasure in rising to second this vote of thanks which has been so ably proposed by Dr. George Macmillan. Your Address, Sir, is full of suggestion and hope for the future. I am sure that we are all pleased to hear that after a few months we shall be suitably housed in the same building we have at present, and the Institute is to be congratulated on its success in securing the adjoining galleries. You have rightly told us that our art does not make history rapidly, and the younger members should understand that in their striving for originality they are often stultifying the proper development of their taste. The quick-growing shoots, such as *l'art nouveau*, are sure to wither away as rapidly as they came into existence. You have referred, Sir, to the short-sighted policy of the trade unions. It is indeed lamentable that the great army of good craftsmen should have to march by the strength of their weakest member. These are indeed artificial conditions which do not tend to wholesome development. The future of our profession is, as you have rightly observed, in the hands of the young men. As somebody has remarked, "the life of the nation is in the breath of the school-children." Competition in our ranks does not grow less, and it is extremely satisfactory to know that additional facilities for the learning of our art are about to be realised in the British Architectural School of Rome, and the thanks of the profession are due to Mr. John W. Simpson for his efforts in this direction. The importance of better town planning will be appreciated not only by architects but by the whole population. It seems extraordinary that this great city should have existed for so many hundreds of years without any systematic scheme of design, and we are pleased to hear that the Liverpool University has, through the generosity of Mr. Lever, given a professorial chair for this special study. The new St. Paul's Bridge, to which you have referred, is a case in point. It has been suggested that if this were constructed diagonally across the Thames, with its central axis directed on St. Paul's Cathedral, there would be some possibility of better appreciating the beauty and proportions of the cathedral. Your encouraging remark, Sir, with regard to the royal sanction to our new Charter is, perhaps, new to some of us, and we are glad to hear that there is a prospect of the Privy Council approving of our By-

laws possibly before the beginning of next year, and that when this has been obtained, there will be direct inducement for the whole profession to become embraced in the Institute.

To my mind there is something peculiarly fitting in that Dr. Arthur Evans should be the one man in England to make those discoveries in Crete. The fitness lies in the fact that in a wider field his father, the late Sir John Evans, did as much as if not more than anyone else to carry back the evidences of the antiquity of man's occupation of the earth. It was just half a century ago that M. Boucher de Perthes found in the tertiary gravel beds at Abbeville, in the valley of the Somme, certain flints bearing a curious resemblance to each other. M. Boucher de Perthes forwarded these flints to Professor Prestwich in England, and he consulted John Evans about them, and together they went to Abbeville for the purpose of making an inspection on the spot. Here they found more flints, which had obviously been fashioned by man into implements; and it was thanks mainly to the marvellous intellect of Dr. Evans's father, and his untiring energy, that the history of the neolithic and palæolithic periods has been compiled. Now Dr. Evans, with that intuitive hereditary instinct, conceived that in Crete he would find the evidences of that earlier civilisation which preceded the high culture of Greece. So strong was that impelling force that he went to Crete and looked for what had been lost for thousands of years. He found in the land the outcrop of certain walls, and he could trace by the parched appearance of the land the lines of walls below ground. The next thing he did was to buy the land, and, having secured this, he started his excavations, employing something like two hundred men to carry out the work. The result has been, as all the world knows, the unearthing of the Palace of Minos. We have heard Dr. Evans's lecture on the subject, and we have seen the photographs of the mural paintings of ladies with the saffron-coloured flounces to their dresses. He has told us of the symbolical markings on the walls, and on a previous occasion he told us of the wonderful games board, plated with gold and inlaid with precious stones, which he found on the floor in one of the chambers of the Palace. But it must be remembered that it is only a few years ago that our most distant horizon of the civilisation in Europe showed us the Greek art and culture, behind which an impenetrable veil of ignorance hid all that lay beyond. All honour is due to the man who has swept aside that impenetrable veil of ignorance, and has shown us in the clear light of his own intelligence a more ancient civilisation, a more ancient art and race; and so important is the revelation that our histories of architecture will have to be rewritten in the light of Dr. Evans's discoveries. I remember Dr. Evans speaking to me of the clay tablets with their inscriptions, not one word of which can be read, nor one letter deciphered with certainty; but I do not forget that he said that if only he could translate one word he would ultimately find out the whole language.

This aspect, however, of Dr. Evans is known to all the civilised world; but it is not everybody who knows that behind that modest manner there really beats the heart of an adventurer and a revolutionist. I remember how he, with his youngest brother, the late Dr. Norman Evans, determined, very many years ago, to cross the Carpathian Mountains on foot. Very little was known of the country in those days, and next to nothing of the inhabitants in the wilder parts; but they learnt on arrival that they were in the habit of shooting all strangers! This information did not deter them, and though I do not remember many particulars of this interesting expedition, I do recall how one night they had made preparation to sleep in a cave at the side of a river. The younger brother Norman was fishing in the hopes of getting something for supper, while Arthur Evans unpacked the knapsacks and kindled a fire. As Norman stood fishing he caught sight of a man with a gun at some distance away. It soon became apparent that the man was slowly but surely advancing upon them, but always taking cover behind rocks and bushes; so Norman went on fishing. But he reported the incident to his brother, and he advised him to pack up the knapsacks again and put some quickwood on the fire, and when there was a dense volume of smoke arising Norman pretended he had caught his fish and retired to the cave; after this they both noiselessly crept away into the mountain under cover of the smoke. On they trudged till they chanced upon a worn pathway; this they followed; its winding course appeared to lead nowhere, and as they were both tired out they determined to sleep on the track and follow its course in the morning. Their sleep was disturbed, however. They heard shuffling feet slowly following the track, but were too tired to care much what happened. The feet came closer, and in the semi-darkness the heavy figure of a bear appeared. They lay perfectly still, and the bear sniffed around them and then shuffled off again along its own track.

But Dr. Evans as a revolutionist has played an important part. He speaks Servian as a native, and he lived for some time at Ragusa in Dalmatia. I remember hearing how he dressed himself as a native, and how he went into a *café*, where he chanced to meet his own gardener. So he spent the evening with his gardener, who never for a moment suspected that Dr. Evans was not a native, nor that he was talking to his own master. But this fatal linguistic ability led poor Arthur Evans into great trouble. His sympathies were with the Serbs, and owing to certain revolutionary speeches he had made in public, the Governor of Dalmatia had him locked up in prison. I need hardly say that there was considerable anxiety

in the family circle at home in England, more especially as the only question which appeared to be before the Courts of Dalmatia was whether the young revolutionary should be kept in prison for the rest of his natural life or whether he had not better be shot at once. Fortunately the Government at home, under the late Lord Salisbury, came to the rescue, and demanded that he should be released, and he was released accordingly, with twenty-four hours to clear out of the country, never to return to Austrian territory again. It might be indiscreet to say how he has kept that injunction; but I think I may say with safety that he is as much honoured in Vienna to-day as he is in London. One small incident which occurred when he was in prison may be worth mentioning. As soon as the news arrived in London of his imprisonment his sister and a brother went out to him. They were only allowed to see him behind iron bars, and then only in the presence of two warders, and the conversation had to be conducted in Italian. Now his sister wished to convey certain information to her brother which she did not wish to impart to the warders, so she had, in a minute handwriting, written a letter on thin paper: this she carefully folded up and secreted in the mouth of a snapdragon. At the interview, in the presence of the warders, she asked her brother whether he had read a book entitled "Always look in the Mouth of a Snapdragon." Of course the title of the book had to be given in English. Soon afterwards she presented him with a bunch of flowers, but the hard-hearted warders took them away as soon as his visitors left, and he never got the news the snapdragon contained. But Arthur Evans left much trouble behind him for the Austrian officials. It had been his custom to tear up his correspondence into fine shreds. This waste paper was collected in sacks, and pillows were made for the hospitals and stuffed with the paper. Now it chanced that when he was arrested the sacks were fairly full, and as he was considered to be a very dangerous man the officials seized the sacks, and they spent some weary months in piecing together again his purely personal correspondence. In 1876 Arthur Evans and my brother were out in the Near East during the Russo-Turkish War, and much of the news of the progress of the war came to England from Arthur Evans. They had very exciting times; and it was especially so to my brother, who was taken prisoner by the Montenegrins. No Englishman knows the Balkan States better than Arthur Evans, and he was the first man to penetrate any distance into that wild and lawless land, Albania. I have crossed the border myself, by the Lake of Scutari, and I can therefore appreciate to a certain extent what an appallingly risky expedition that must have been. Arthur Evans, however, made friends with a chief of a district, with whom he managed to ingratiate himself so pleasingly that he was passed on from chief to chief until he was finally told that they would not be responsible for his life any longer. Escape by night was his only chance, and he came through all right, though he did get shipwrecked on the Lake of Scutari. Mr. President, in referring to Arthur Evans I began by speaking of things which are known to the world, and I have spoken of matters which are known to few besides himself. To conclude I will speak of one small incident in connection with him which I may safely say is known only to myself. I think that I am right in saying that the Governor of Dalmatia who actually signed the warrant for his arrest, and who signed the warrant for his banishment from Austrian territory, was Jovanovitch. Now I may tell Dr. Evans that a few years after those warrants had been signed I met Jovanovitch, and the interview came about in this way. I was conducting a little enterprise of my own in the Balkan States, and I was unfortunately committed to my enterprise before I became aware that I required a Government permission to carry it on. The situation had a somewhat serious aspect, so far as I was concerned, for I had come to the end of my resources, and I was stranded in Dalmatia. I was sitting in my hotel trying to evolve some scheme by which I could extricate myself from my difficulties when suddenly a perfectly charming lady introduced herself to me, with many apologies for her intrusion. She explained that at that time she was the only English lady in Dalmatia, and having seen that I was English she had nerved herself to calling upon me. She took a most tender interest in my enterprise, and her sympathy for my unfortunate position with regard to it knew no bounds. She said she knew Jovanovitch, and he, as Governor of Dalmatia, would be able to give me the permission I desired. She kindly promised to give me an introduction to him, and in due course I saw Jovanovitch, and a very odd interview I had; but I obtained my permission. I am ashamed to say that I have forgotten the lady's name, but I gathered that she was a spy in the pay of the Government, and that her call upon me was a business call, and not the result of an impulsive and ingenuous nature. She told me, among other things, that her business was to translate foreign telegrams for the Government. I asked whether this was not very difficult sometimes. "No," she said, "they never presented any difficulties excepting those of an Englishman, a certain Mr. Evans." Yes, Arthur John Evans is a many-sided man, and not always easy to be understood. He is, I think, the fifth generation on which the distinction of F.R.S. has been conferred. This is unique in the history of the greatest of the learned societies, and I am glad that our Institute has conferred upon him the greatest honour it can confer upon anybody, and I heartily congratulate him, and you, too, Sir, for your admirable Address, and it gives me much pleasure to second the vote of thanks to you.

REVIEWS.

TOWN PLANNING.

Town Planning in Practice. An Introduction to the Art of Designing Cities and Suburbs. By Raymond Unwin. With 300 illustrations. 4o. Lond. 1909. *Price* 21*s. net.* [*T. Fisher Unwin, Adelphi Terrace, W.C.*]

Plan of Chicago, prepared under the direction of the Commercial Club during the years 1906, 1907, *and* 1908. *By Daniel H. Burnham and Edward H. Bennett. Edited by Charles Moore, Corresponding Member of the American Institute of Architects. 4o. Chicago,* 1909.

The almost simultaneous publication of the above books illustrates in the most striking way the distance we have to go if we are to arrive at a uniform standard in the matter of civic design. While it is clear that Mr. Raymond Unwin has studied some sides of the question with much greater thoroughness than those responsible for the production of the Chicago report, the broad way in which the latter have regarded the problem presented by their city is highly instructive.

Dealing first with Mr. Unwin's book, one must compliment the author on the quantity of information he has gathered together, and on the skilful way he has arranged this to illustrate the various sections into which the book is subdivided.

In this work the author has obviously taken the greatest pains to hold the balance fairly between the two main schools of town planning, though, as might be expected, he has been unable entirely to disguise the view which is the more congenial to his temperament. Indeed, one is almost sorry that he does not frankly disclose his prepossessions rather than devote such a large portion of his book to the illustration of work in support of which he can advance no very definite recommendations. If the formal design of cities had been given the same philosophical considerations as the informal, its origin and aims might have been made much clearer. As it is, despite the obvious intention of putting both on an equal footing, the portions dealing with informal refinements possess a note of vitality denied to other sections.

In most respects, however, one recognises with pleasure the comprehensive scope of this work, which commences with a most interesting review of recent efforts, including references to the work of Mr. Ebenezer Howard, that culminated in the Letchworth experiment, and to the studies of Mr. Horsfall.

The second chapter deals with the factors imparting individuality to towns, and is illustrated by examples dating from 3000 B.C. in Egypt down to the latest German developments, the latter being most ably summed up in the following paragraphs:—

"However much we individually may like or dislike the particular style and the detail treatment adopted by the Germans, we cannot but feel the highest admiration for the skill and the thoroughness displayed in their town-planning work; no labour seems too much for them, no number of revisions too great to be made so that they may bring their plans up to date and in accordance with the best style that is known and approved by the skilled town-planners of the country; and while there is much in their work that one would not wish to see copied in English towns, there can be no question as to the immense benefit to be derived from a careful study of that which has been accomplished in a field where they have been working earnestly for many years, and where we are, in comparison, mere beginners.

"While, however, the importance of most of the principles which Camillo Sitte deduced from his study of mediæval towns may be as great as the modern German school thinks, it does seem to me that they are in danger of regarding these principles as the only ones of great importance; nor do they appear to realise how far it is possible to comply with these principles in designs based upon more regular lines. Some of the irregularity in their work appears to be introduced for its own sake, and if not aimlessly, at least without adequate reason; the result being that many of their more recent plans lack any sense of framework or largeness of design at all in scale with the area dealt with.

"If we examine the plan of Rothenburg we see how, especially in the original old town, the scale of the principal places and streets is sufficiently large for them to dominate the town, and to provide for it a frame and centre points that render the whole really simple and easily comprehensible to the stranger, but in any such plan as that of Pforzheim one feels the same simplicity is lacking. In the case of towns arranged on land having such complicated contours as characterise the neighbourhood of Pforzheim, it is of course impossible to criticise the plan fairly without an intimate knowledge of the ground. The system of roads appears to be most admirably adapted to contours; nevertheless this kind of plan, which is characteristic of much modern German work, seems lacking in the simplicity of framework and order of design which are needful to enable the plan of the town to be readily grasped. It would be very easy for a stranger to get lost in such a town. The same remarks apply to the town of Grünstadt, which covers a far smaller area. The continual repetition of small, irregular *places* and road junctions suggests a degree of artificial imitation of accidentally produced features hardly likely to lead to successful results in the hands of modern builders, who have completely lost touch with the tradition which apparently proved so successful a guide to our forefathers."

One of the best of the numerous modern German plans given in Mr. Unwin's book is that for Kufstein, reproduced overleaf [fig. 1].

The opening words of chapter iii. will illustrate the author's intention of maintaining a sympathetic attitude towards both schools of town planning:—

"We can hardly have examined the many different town plans referred to in the last chapter without realising that in spite of their great variety they fall into two clearly marked classes, which we may call the formal and the informal, and that there are to-day two schools of town designers, the work of one being based on the conviction that the treatment should be formal and regular in character, while that of the other springs from an equally strong belief that informality is desirable. From the views given of both types of town we shall almost certainly agree that a

high order of beauty has been attained by each method, for although our personal preference may lean strongly to one or the other type, there will be few who will not admit great beauty in many of the examples of its opposite. We are all sensible of the beauty of such towns as Oxford and Rothenburg, where hardly any lines are straight, any angles square, or any views

while the other school is known by the title 'formal,' which describes its work.

"The former school, as its name implies, bases its work on the admitted beauties to be found in landscape scenes. Finding little or nothing of formality in wild nature, it rather rashly assumes that formality in garden work is unnatural, and the less intelligent

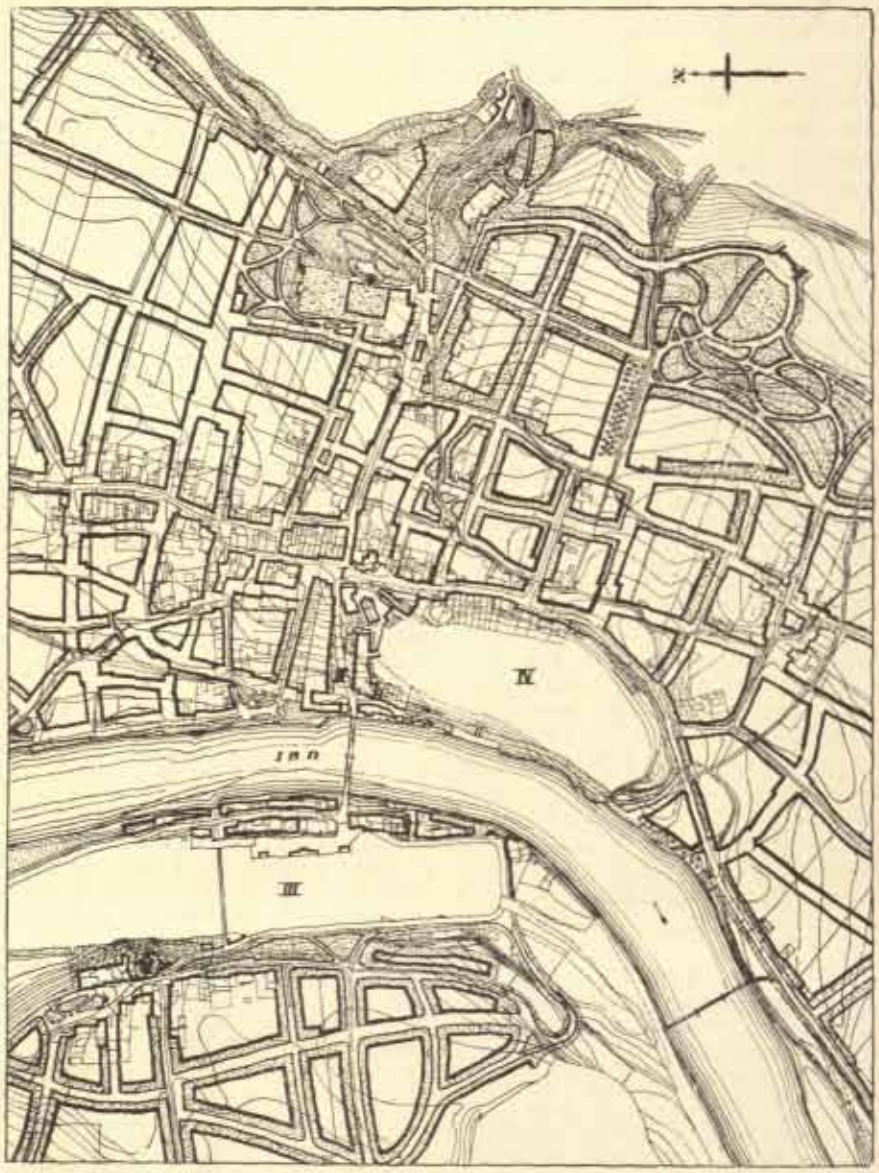


FIG. 1.—GENERAL BUILDING PLAN FOR THE TOWN OF KUFSTEIN BY HERR OTTO LASNE, ARCHITECT.
I. Ober-Stadtplatz; II. Unter-Stadtplatz; III. Railway area; IV. Festa Gerold-seck.

symmetrical, but we are alike impressed by the formal parts of Paris, Nancy, or Copenhagen, with their straight streets, regular squares and sky-lines, and symmetrical pictures.

"In this country we are, perhaps, more familiar with two schools in the sphere of garden design: the landscape school representing the devotees of informality,

section easily passes from such a doubtful premise to the even more doubtful conclusion that the avoidance of formality will produce the natural. . . .

"The landscape school has taught us the importance of careful study of the site and its possibilities, a reverence for the existing natural beauties to be found upon it; it has taught us the pleasure to be derived

from a wide outlook, the homeliness to be produced by simple treatment, the effect of contrast between enclosed spaces and spaces commanding wide views; while from the formalist we have learned how all these effects may be obtained through the medium of beautiful formal design. The formalist needs to remember that his design is subordinate to the site, that the undulation of the ground and the presence of natural features of beauty worth preserving will frequently require some departure from the regularity of his treatment. His formalism must be regarded as a method of carrying out definite aims, and not as an end in itself justifying either the destruction of existing beauty or the creation of formality for its own sake."

Another paragraph in the same chapter sets forth very clearly the problem before the town planner:—

"If the designer is to go to work in a right spirit, he must cherish in his heart a love for all natural beauty, and at the same time have always in his mind a clear appreciation of the beauty of the definite design which he seeks to develop. His regard for a type of beauty which it is beyond his power to create will cause him to approach his site with reverence, will fit him to receive from it all the suggestions which it has to offer. It will help him to realise the importance of incorporating his design with the site, and of so arranging his scheme of laying out that it may serve as a means of harmonising his buildings with the surrounding country. It will save him from rashly destroying trees or other existing features which, with care, might be preserved and incorporated in his design. At the same time, his belief in the rightness and the importance of definite design will prevent him from sacrificing it unduly to quite minor features of the site, which, however charming they may be in their present state, may either lose their value in the new conditions to be imposed, or may be of less importance than the completion of the scheme."

Chapter iv. summarises the essential studies comprised in the city survey as a necessary preliminary to the design of town improvements or extensions; the topographical, climatic, social, commercial, and other conditions are pointed out as requiring careful study, and a plea is put in for some homogeneity in architectural treatment and in the use of materials.

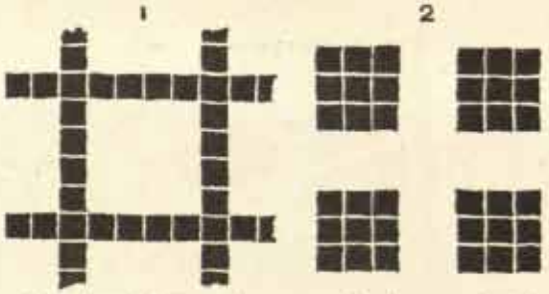
In chapter v., dealing with boundaries, the author's study of mediæval cities leads him to the following conclusions:—

"There can, however, be little doubt that it is possible to set a limit to the size to which a town shall extend continuously without some break, some intervening belt of park or agricultural land; and this at least it is most desirable to secure. Thus we may derive useful lessons from the beautiful towns of other lands and other days, not seeking to copy their features, but finding the reasons which gave rise to them and gathering some suggestions which may in turn help to beautify our own cities. Though we shall not copy the fortified wall of the old city, we may take from it a most pregnant suggestion of the value of defining and limiting towns, suburbs, and new areas generally. This may be done in many ways. In numerous continental towns which have outgrown their fortifications or where the changing character of warfare has rendered wider rings of ramparts needful, the removal of inner rings has given an opportunity to replace them by wide boulevards, avenues, or belts of park land, which do to a large extent maintain the break and the definition of the old wall. . . .

"In large towns or areas it would be desirable to secure wide belts of park land, playing fields, or even agricultural land. In any case, we should secure some orderly line up to which the country and town may each extend and stop definitely, so avoiding the irregular margin of rubbish-heaps and derelict building land which spoils the approach to almost all our towns to-day. These belts might well define our parishes or our wards, and by so doing might help to foster a feeling of local unity in the area. As breathing spaces, they would be invaluable; as haunts for birds and flowers, and as affording pleasant walks about the towns, free from the noise and worry of modern street traffic, they would give endless pleasure, and would in a very true and right way bring into the town some of the charms of the country. It is not an easy matter to combine the charms of town and country; the attempt has often led rather to the destruction of the beauty of both. A certain concentration and grouping of buildings is necessary to produce the special beauties of the town, and this is inconsistent with the scattering of buildings which results from each one being isolated in its own patch of garden; but it is not inconsistent with the grouping of buildings in certain places and the provision of large parks or gardens in other places. If we are to produce really satisfactory town effects combined with the degree of open space now thought advisable, we must work on the principle of grouping our buildings and combining our open spaces, having areas fairly closely built upon, surrounded by others of open space, rather than that of scattering and indefinitely mixing our buildings and our spaces."

Attractive as the picture appears it may be doubted if the adoption of such a scheme would not result in the frittering away of the area available for useful parks.

The accompanying diagrams show: (1) Mr. Unwin's "reticulated" method, and (2) the same proportion of open space gathered into concentrated blocks.



Black shows in diagrammatic form open space on "reticulated" plan.

Equal area concentrated in detached parks.

FIG. 2.

Even apart from this objection it may be regarded as a doubtful solution of the problem of the

design of a great city to subdivide its outskirts into a number of small ones.

In several respects this section might have been treated in a broader spirit.

Chapter vi. opens with a comprehensive discussion of the advantages of central grouping and open spaces that will meet with general approbation, leading on to the question of the design of enclosed *places*, following the general principles laid down by Camillo Sitte. The illustrations to this portion are of exceptional interest. Mr. Unwin follows this author in insisting on the enclosed effect in the *place*,

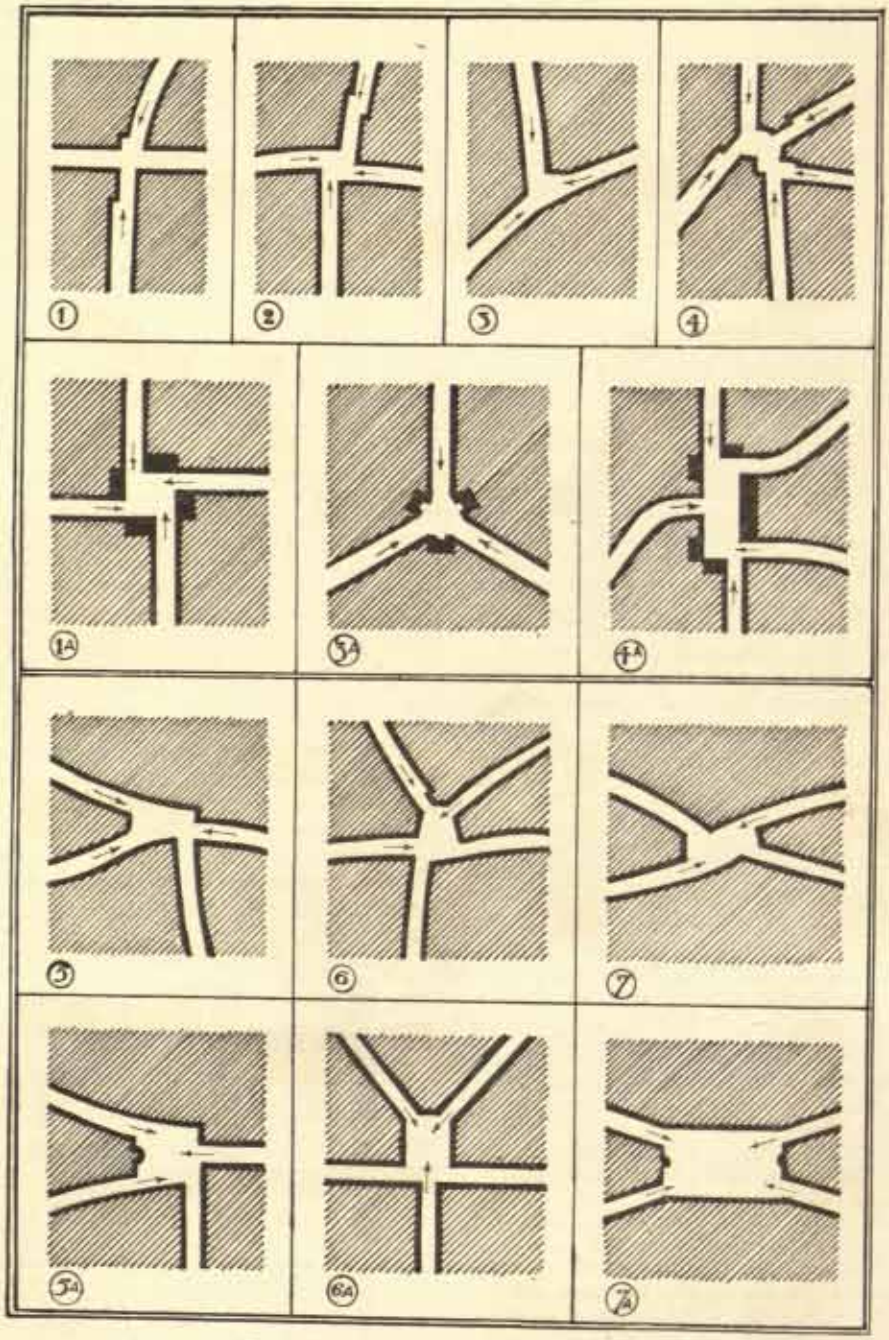


FIG. 2.—SKETCHES OF VARIOUS ROAD JUNCTIONS.

Nos. 1 to 7 show irregular junctions as found on many modern German town plans. Nos. 1A to 7A show more regular types of road junction, securing much the same result in the way of closed street views.

and evidently attaches less importance to the opposite view that it may be desirable for the *place* and its monuments to dominate and form part of a view looking up adjacent streets and avenues.

The plan of the town square at Letchworth shows how the advantages of both methods may be to some extent obtained [fig. 6, p. 16].

Chapter vii., "Of the Arrangement of Main Roads," sets out with a *résumé* of the views of Sitte and Stübben, and includes a reference to Hénard's "Carrefour à Giration."

Mr. Unwin rightly distinguishes between the qualities of the road plan best suited to traffic and those affording the best sites for buildings, and points out the necessity of conceding something from the one point of view or the other.

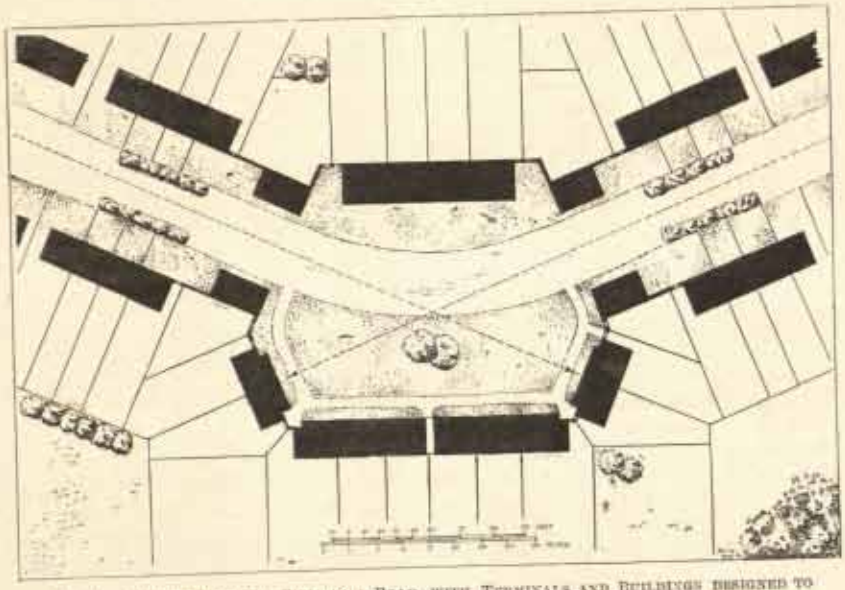


FIG. 4.—ARRANGEMENT FOR BEND IN A ROAD, WITH TERMINALS AND BUILDINGS DESIGNED TO FRAME AND DEFINE THE STREET PICTURES.

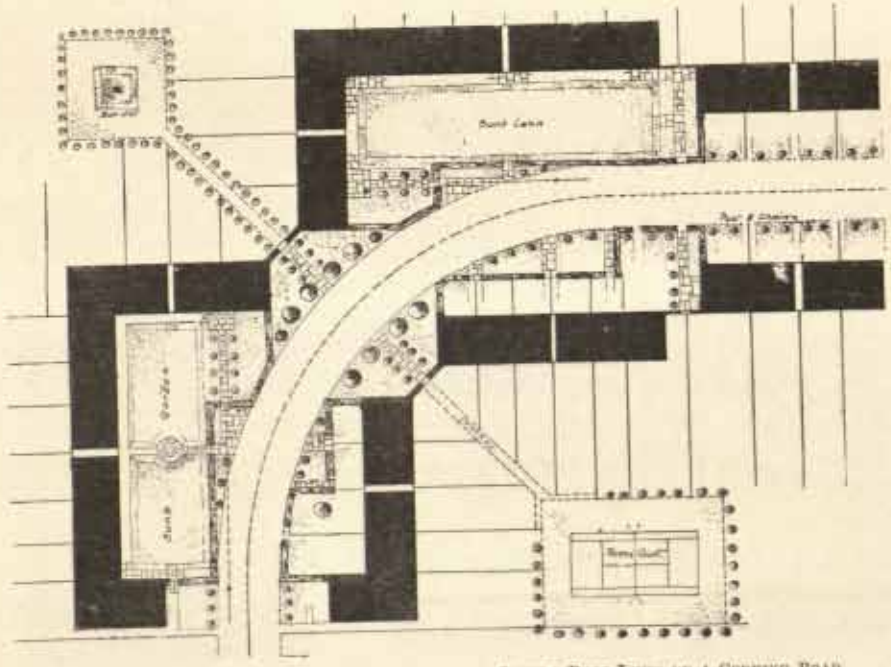


FIG. 5.—GROUPS OF BUILDINGS DESIGNED TO MAINTAIN SQUARE ROOF LINES ON A CURVING ROAD.

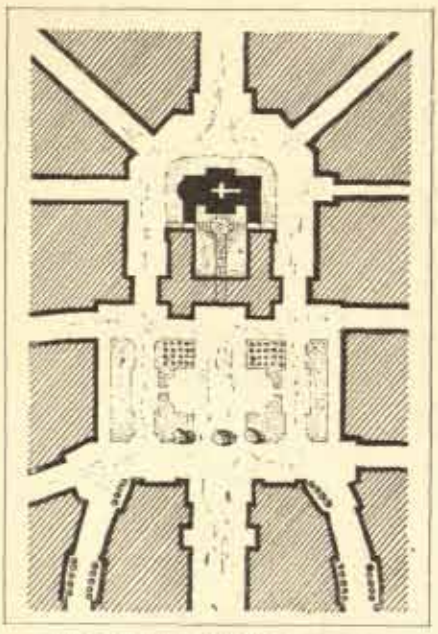


Fig. 6.—Town Square at Letchworth.

He gives an instructive series of plans and views of street lines and connections [fig. 3]. The chapter closes with some sound advice on the laying out and planting of gardens and open spaces.

Chapter viii., on Site-planning, deals with the subdivisions of the area left between the more important roads, and includes a careful investigation into the relative merits of various aspects for dwellings.

Chapter ix. deals with the allowance of area for buildings, and the best arrangement for these and the plots on which they stand. The harmony of the lines of the buildings where roads are curved receives careful attention. The accompanying plans are selected from a number illustrating typical cases [figs. 4 and 5, page 15].

Chapter x. maintains the desirability of harmony in the general character of buildings if their effect as a whole is to be satisfactory; a good example of this is reproduced below [fig. 7].

Chapter xi. deals with the advantages of co-operation in site-planning.

The plan of Wells introduced on page 380 might be used to illustrate a piece of unconscious town-planning in the action of the principal innkeeper, who pulled down two houses in Sadler Street in order to open up a delightful view of the cathedral from his hotel.

Chapter xii., "Of Building By-laws," deals principally with their defects as regards suburban areas. Some notes might have been added on the injurious effect our present building regulations have on the architectural character of our more important streets.

Attention may be drawn to the excellent bibliography with which the book closes; in fact this



Fig. 7.—Rothenburg: View showing General Harmony of Buildings.

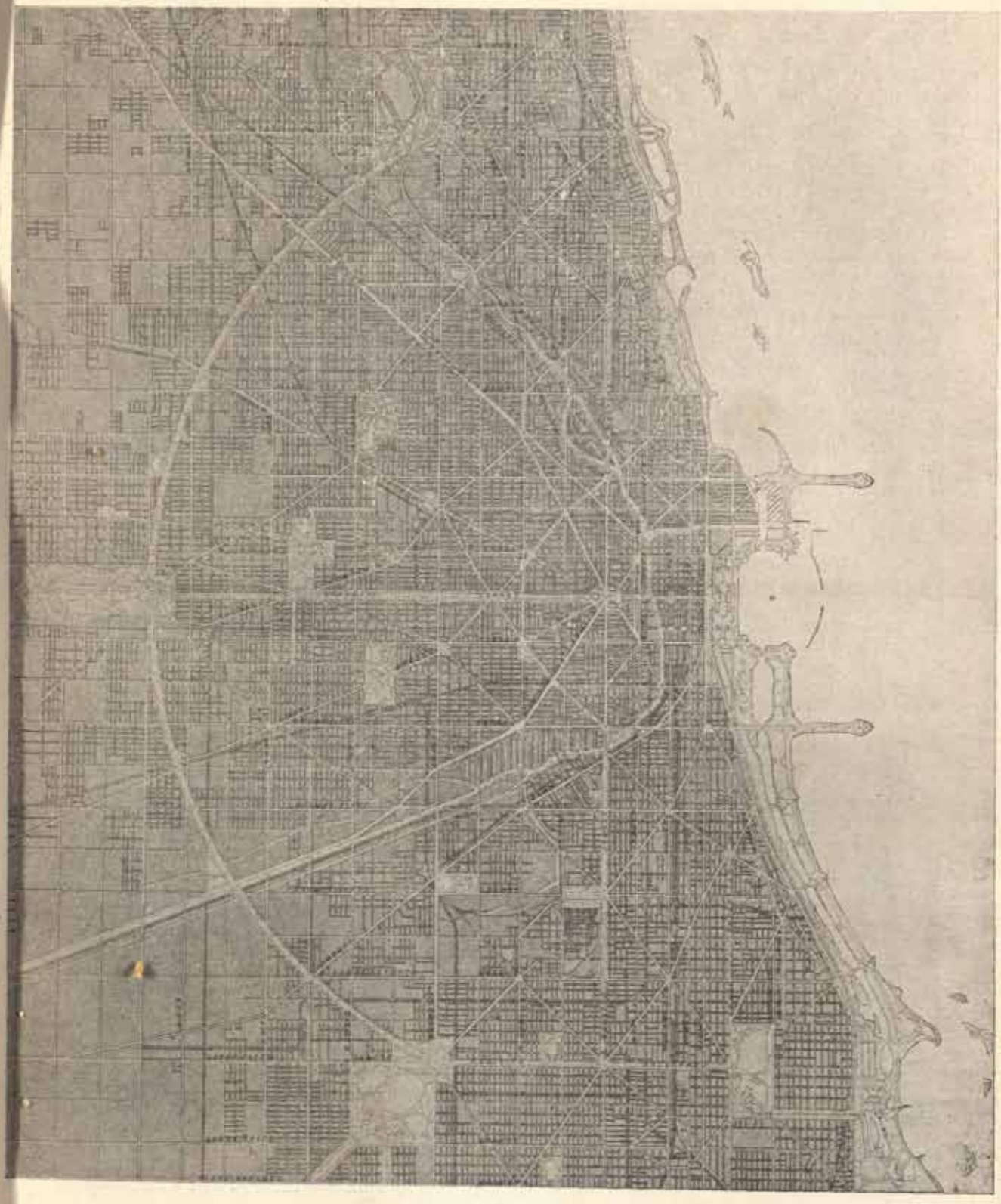


FIG. 8.—CHICAGO: PLAN OF A COMPLETE SYSTEM OF STREET CIRCULATION AND SYSTEM OF PARKS AND PLAYGROUNDS, PRESENTING THE CITY AS AN ORGANISM IN WHICH ALL THE FUNCTIONS ARE RELATED ONE TO ANOTHER.
Reproduced from Messrs. Burnham & Bennett's *Plan of Chicago*.

work throughout shows evidences of the comprehensive character of the author's studies; and, if one would have liked to see some branches of the subject dealt with more fully, it must be admitted that this could not reasonably be done without either enlarging the book or excluding other matter of equal interest.

Chicago Report.

The prevailing note of the Report on the future of Chicago, by D. H. Burnham and E. H. Bennett, is undoubtedly courage. The location and development of this great city have been dictated by purely commercial considerations, and its site compares most unfavourably with those of other large towns when considered from the æsthetic standpoint. A widespread plain, with but the most trifling variations in its level, traversed by two or three meandering streams hardly large enough to define themselves amid the surrounding flats, a lake front tame in its lines, and never a hill or promontory to hold the eye, offers, one must admit, but poor material for the work of the town planner. Yet here we find two men, with the hearty and enthusiastic support of their leading fellow-citizens, setting gallantly to work to show how this great aggregation of life and industry can be housed in a manner equal in dignity and convenience to any that may be met with in the noblest cities of Europe.

It is gratifying to all sincere students of kindred problems to note the thoroughness with which the task has been handled. It may be that we shall not all agree with the exact lines adopted, or even with all the principles enunciated; but it must be borne in mind that in considering such an enormous area, probably a greater one than is free to be dealt with by any other city, only the simplest and clearest lines can be laid down; the elaboration of detail would confuse the issues and destroy the impression it is desired to make on the citizens as a whole. Thus the rectangular system on which Chicago is laid out is frankly accepted and adopted for future developments. Its practical advantages of simplicity and convenience in building are doubtless felt to outweigh, on an absolutely level site, any artistic defects it may possess. This system is supplemented by good thoroughfares on radial lines, and one large encircling boulevard linking up the more important inner parks [see the accompanying plan, fig. 8]. A comprehensive series of outer parks following the principal river valleys is also in course of acquisition, and an extensive scheme is proposed for the improvement of the water front.

The Report deals comprehensively with land and water transport, and contains numerous suggestions aiming at the entire remodelling of the passenger and freight lines and drastic modifications in the present shipping and lighterage methods. All the suggestions under these heads seem to be most carefully reasoned out, and bear the impress of systematic study. Perhaps the purely æsthetic portions of the work appear by comparison to be dealt with in a more sketchy fashion, but allowance must be made for the difficulty of handling a scheme on this gigantic scale in full detail at its earlier stages. The more important centres are illustrated by suggestive sketches, which may fairly be regarded as suitable starting-points for more detailed designs.

The Report closes with a note as to the legal powers, which demand extension in some directions, and with a brief outline of the financial aspects of the case, which conveys the impression that the present limited borrowing powers will only admit of the suggested improvements being carried out very gradually.

H. V. Lanchester [*F.*].

A CHAPTER IN EVOLUTION.

A History of Architectural Development. In three volumes. Vol. II. Mediæval. ("The Architects' Library" Series.) By F. M. Simpson, Professor of Architecture in the University of London. With 257 illustrations. 8o. Lond. 1909. Price 21s. net. [*Longmans, Green & Co., Paternoster Row, E.C.*]

Professor Simpson's Vol. II. of his *History of Architectural Development*, which has been looked forward to with interest since the publication of his first volume, comes as a welcome addition to The Architects' Library issued by Longmans. The volume is entitled "Mediæval"; but under this title, as the Preface tells us, ecclesiastical architecture only is dealt with, secular buildings being barely mentioned. Convenience, no doubt, dictates this arbitrary limitation in the use of the title—one might say this appropriation of the title, for no one, of course, knows better than the author how unscholarly it would be, viewing the building-work of the Middle Ages as a whole, to define Mediæval Architecture as Church Architecture. To trace development in one class of structures only may make for simplification in a complex inquiry, especially if this class happens to afford a good choice of examples; still, it seems a pity, for want of a few premonitory words in a handbook for students of architecture, to leave more of these students than need be to the chance of growing up with the notion that, in the history of mediæval building-work, it is only the church building which counts as architecture. The builder's calling is as available for secular as for sacred needs; and it rather takes one's breath away to find, in a history of architectural development, the whole of the secular building-work, comprising such items as the castles, the colleges and the town halls, the belfries, the houses and the bridges, deliberately left out of account. So one-sided a view of a great subject is unexpected in a professedly complete work of reference for architects, even though this may not claim to be more than an introduction. There is still need to teach how much greater a thing even

han church architecture was mediæval architecture.

The first half of the volume, we are told, treats in detail of the parts of churches, the second of the churches themselves. This division of the volume into two halves duly appears in the lists of contents and of illustrations, but in the text itself no indication is given of any such division into Parts. Save in a few pages of Introduction, the thread of history from the previous volume of this series is not here taken up until chapter ix.; as the author puts it: "a consideration of actual examples follows the detailed analysis of their parts. In other words, the grammar of Mediæval Art precedes the compositions in it." Whatever authority there may be for such handling of the subject it has the effect, in this case, of inverting the due order of things, seeing that the work is entitled a history, not a grammar, and its aim is stated to be to trace the development of architecture through the planning, construction, materials, and principles of design of the buildings described. It would seem only fair to have let us trace the main story, as told by the planning and constructional systems exemplified in the last fourteen chapters, before having first to get through the detailed analysis of parts and features comprised in the earlier chapters. We should then be keeping to the course in which the conception and development of the architecture in question has actually proceeded; and this course of evolution cannot be pressed upon the attention of the student of architecture too early.

As it is, instead of our finding the compositions arranged in continuous, historical sequence with those in the previous volume, we have the history interrupted by eight chapters of what the author calls grammar. He himself seems to see necessity for a few words of introduction in chapter i., though he confines these to remarks "regarding the sectional ordinances of churches." Then, taking in order the chapters dealing with parts and features, he gives us, in chapter ii., arch development, followed, not by vaulting, as might be expected, but by columns, piers, caps, and bases in chapter iii.; walls and buttresses, in chapter iv., lead on to development of windows in chapter v.; only then comes vaulting in chapter vi., succeeded by towers and spires in chapter vii.; whilst decoration, sculpture, and stained glass close the series in chapter viii. After all this we are brought, in chapter ix., to the consideration of the development of church plan in France and Germany from the ninth century onward, at length resuming the thread of the story from Vol. I. The development of church planning through Germany, France, Italy, and more particularly England is pursued in chapter x. Next come five chapters entitled "Romanesque"—in Italy, in Germany, in Southern France, in England, and in England and Normandy. "The Cathedrals of Northern France" is the title of chapter xvi., and this is followed by five chapters on "Gothic Architecture"—in Southern France; in England and Scotland; in Germany, Belgium, and Holland; in Italy, and in Spain. The final chapter, xxii., lands us home again in England, to the consideration of our parish churches and timber roofs.

The structural system of the volume being thus indicated, it remains to see how the design works out. The book is, at any rate, on an intelligible plan, and can be used to teach from, the material embodied in it being arranged in definite order available for serious study. The writing is unsensational and without embellishments; it is neither gushing nor smart, and is not overweighted by too formidable an array of plates and figures. The illustrations, which are clear and workmanlike, appear to be introduced simply for the good, old-fashioned purpose of elucidating the adjacent text, and are mostly arranged in reasonable proximity to the references made to them. Without parade of information or the least suggestiveness of the illustrated catalogue, the book steers fairly clear of petty questions of nomenclature that tend rather to darken than to enlighten concerning the real issues. There is no fine writing or sentiment, no undue insistence on fancy names and catch-words, no too obvious attempts to push pet theories. Although necessarily a very condensed sketch of what was accomplished in the way of church-building in Western Christendom through the six centuries or so covered, this is a genuine attempt to read the history in the fabrics of the buildings remaining to us.

"The key-note of mediæval art is arch construction; without it the large floor-spaces, necessary for congregational and ritual requirements, could not have been covered in a sound and satisfactory manner," says Professor Simpson; recollecting next moment that timber roofs were employed to some extent, especially in England, Germany, and Italy—no small reservation when we come to think about it. His concluding chapter emphasises this point. Carpentry indeed had its place in mediæval architecture; of the English, at any rate, it would be hardly an exaggeration to say that they have proved themselves a nation of carpenters. From before the days of Alfred down to within living memory we had built our ships of timber; and well into post-mediæval days our houses too, over wide tracts of country, were mainly framed in oak. The timber-framed roofs of our churches, our halls, and even our barns, remain to be counted amongst the achievements of mediæval architecture. Assuredly these strike a note in the chorus of mediæval art without which the harmony would be incomplete, be the keynote what it may be. The shaping of the arch, varying as time passed, offers a subject for the investigator given to classification. Of more significance even than the shape of the arch was the constructive principle of subordination in it of orders or concentric rings, which was so thoroughly worked out in mediæval building. This, and the consequent membering of capital, pier, and

base in alliance with the arch, is clearly described and shown in chapters ii. and iii.

Buttressing, which so largely developed out of the necessities of vaulting, comes in the book, as we have noticed, before vaulting itself, and gets classified with walling in chapter iv., in which chapter also we find something of plinths, string-courses, and parapets. The function of the wall-buttress, as a strengthening prop and thrust-resister—running up eventually into the pinnacle—is duly expounded with illustration in this same chapter; but for the development and function of the flying-buttress we are inevitably referred to chapter vi., in which vaulting is considered. Thus the dissociation of arch from vault involves the severance also of the two great classes of buttress. Between them comes window development in chapter v. Herein the steps by which the grouping of window openings and wall piercings led up to the complete traceried window—one of the chief glories of mediæval art—are briefly but clearly set forth.

Vaulting is described by the author as the most characteristic trait of mediæval architecture, yet it is recognised by him as being by no means universal in church building. In this chapter vi., one of the most important in the volume, we get a good general survey of the vaulting problem as solved in the course of centuries by the builders of the Middle Ages. Questions which have been the subject of rather recent controversy are touched on—questions of still unexhausted interest, and inviting enough to anyone with sufficient hardihood to rush in. Inseparable from the subject of vaulting is that of the introduction of the pointed arch—an old building form now put to new purpose by masons of inventive mind who found themselves confronted by a practical difficulty which they strove to overcome. Supposing these masons could have been told that, in consequence of their action, they were thereafter going to be credited with having led up to a change in the very nomenclature to be invented and applied by writers of a later day to their building work—would not this taking of "but a single step over an invisible line"—to adopt Professor Lethaby's happy expression—have struck them as a matter too small to stand talking about, too trivial to hold the attention of men with work to do?

The subject of chapter vii.—viz. Towers and Spires—is one of unfailing attraction to students of mediæval architecture; and of this subject the chapter affords a fair sketch, so far as it goes. It hardly goes so deep as might be wished. The question of the central tower, for instance, is so intimately bound up with that of the cross-planned church, the prototype of our mediæval cathedrals and important abbey churches, that one would have welcomed some more explicit account of the origin and development of this feature, the lantern raised aloft over the midst of the fabric. For that, however, we have to search through the former volume and the later chapters of this one.

Part I. is concluded by chapter viii., treating of Decoration, by chisel and brush, including inlay, mosaic, and stained glass: a very wide field in which to trace out development from earlier to later forms. Yet, without such chapter, a History of Architectural Development would sadly lack finish. For a perusal of this chapter reminds us that the mediæval builders were the inheritors of fine decorative traditions—traditions as old as architecture itself—and that our calling-up of the bare forms alone of their structures may afford us but a feeble picture of what they really made of their works, or meant to make of them, the interiors especially. How many a great church, for instance, must have been conceived of, from its commencement, as a great decorative scheme, to be realised by brush and chisel in a permanent structure; with the design of which the idea of its decoration, as a vehicle for teaching no less than as a mode of adornment, was indissolubly bound up.

The remainder of the volume—viz. Part II, the history proper, in fourteen chapters—covers the development of church structures from where the subject was left in Volume I. until the end, which, in this country, the author appears inclined to put at a late date indeed. "In fact," he says, "the Gothic spirit lingered in England until—strange irony of fate—it was destroyed by the movement in favour of a Gothic revival." Accordingly, it seems that the next volume, in preparation, entitled Renaissance, will come, so to speak, as an overlap in our island story. Thus must the design work out, of chopping up history of architecture, according to accepted rule, into neat lengths, labelled and ranged in certain order under titles and chapter-headings. By maintaining under these chapter-headings the regulation division in mediæval building history, between work that is called Romanesque and work that is called Gothic, the author helps, in effect, still to keep up a verbal barrier erected only by nineteenth-century writers of books about the work, not by men who did it. It is true, these terms are admitted merely in accordance with convention, apparently, since in the very first chapter we were told that "no greater mistake can possibly be made than to suppose that a hard-and-fast line separates Romanesque and Gothic architecture; they are not two independent and separate styles. In the chapters which deal with the parts of buildings no division is made between Romanesque and Gothic, because none exists." Another survival from mid-nineteenth-century days crops up in due course—viz. that remarkable fiction, the so-called Transitional Period, which must surely have been designed with the object of reconciling architectural book readers, brought up on the doctrine of The Periods, to the hard fact of masons having chosen to build themselves round arches and pointed arches in the very same piece of work. Transitional, to be sure. As though there were anything but transition from beginning to end! However, one result of the arrangement of the chapters in Part II. of this book is that Early Romanesque in England and Romanesque in England and Normandy get completely

separated from Gothic architecture in England and Scotland, and this last, again, by several chapters, from English Parish Churches. This somewhat unfortunate decree of separation, on paper, may rather confuse the general idea of the history for simple-minded inquirers into the facts. After all, to an investigator of the facts it really matters little by what names building work of the past may now be called; what was the work done, and when was it done? are the questions that do matter. Familiarity on the part of the student with modern nomenclature of work done in the past and actual knowledge of the work itself may go together, of course, but they are not inseparable.

Whether what may be termed the semi-geographical ordering of these chapters on the history of mediæval ecclesiastical architecture affords quite so true a picture of the subject as a whole as could have been given by unfolding the tale in closer chronological sequence, paying less strict regard to territorial considerations, may be an open question. The continuity of the story, at any rate, might have been better maintained in some respects than it has been. Conceivably the promise of the title might have been none the less well fulfilled, and a no less thorough realisation of the unity of the subject have been secured, by keeping more to chronology than to geography in the grouping of the subject-matter throughout. But, to reconcile the conflicting claims of time and of locality must be a standing difficulty to the writer of history; and maybe it is easier to raise a question as to the method employed in a particular case than definitely to indicate a better one, and say exactly how it might be applied in an extended investigation, such as this.

We do not always fully appreciate the magnitude of the task of obtaining and presenting any clear and comprehensive bird's-eye view of a whole wide-spread field of architectural development, such as this volume comprises, of getting to see the vast, complex movement in its continuity—as a pageant—and of then condensing it all, for the enlightenment of students, into a concise and lucid narrative. To accomplish this and to embody in a single volume such a survey of mediæval architecture in Western Europe including the British Isles—though it be of the church architecture only—is really an immense undertaking, calling at once for broad vision and for deep insight; and Professor Simpson is entitled to generous recognition from fellow-students of architecture for this contribution of his to our literature on this great subject.

Some points of detail in the book call for notice; mention of a few only must suffice. In England the pointed arch was not used constructionally before 1140, we are informed. The truth of this statement is subject, as the writer virtually admits, to the dating of the Durham nave vault being proved to be some ten years later at least than anyone has succeeded in proving it. Concerning Durham Cathedral we find him seemingly inclined to commit himself to a reading of work there at variance with generally acknowledged authorities on this structure. But good men before him have gone astray over Durham. In England, we are further told, the art of brickmaking had died out since the Roman occupation, and was not reintroduced until the fourteenth century. This is hard to reconcile with the thirteenth-century moulded brickwork at Coggeshall, Essex, to name one instance. As an exception to the statement in the text that "in Romanesque windows the lights are seldom more than thrice their width in height," the east window lights of Buildwas Abbey Church are cited, in a note, as being nine times their width in height. The explanation why this is an apparent exception is not given—viz. the simple one, that these lights were originally in two tiers of triplets, centering light over light, and that they were subsequently converted into a single tier of three tall lights by just cutting out the masonry from the sills of the upper triplet down to the heads of the lower—evidence of which is quite clear in the work, the springing-stones of the lower window arches having been left in position. The allusion to the churches of Barfreston, Kent, and Adel, Yorks, as having been built long before St. Bernard became a power, sounds questionable. The following appear to have escaped the proof-reader, viz. *Flamard*, *Burton*-on-Humber, the pre-Norman church of St. *Martin*, at St. Albans and *Isle* de France.

In this volume no list is given of books of reference, as there was in the last; but in an Appendix we find a Table of Dimensions of Typical Churches, grouped under various heads to illustrate differences in scale and proportion. Whatever may be the precise value of such a table, as an aid in tracing development, this value would be enhanced not a little if there could be added a supplementary list showing, as nearly as can be determined, the chronological placing of the examples. It seems rather a small thing to be able to read merely the lengths and widths and heights of selected churches, to compare their relative sizes only, without at the same time being enabled to compare their relative ages; which example exceeds which in certain dimensions, may be a matter of some consequence; which precedes which in order of execution, may be a point of vital import in the history of architectural development.

It is pleasant and helpful to have all the church plans in the book consistently turned in one direction—with their east ends to the right hand. One could wish that more of these were shaded, to explain structural growth, after the manner of that given of Canterbury Cathedral, from Professor Willis's book. To read structural development in individual buildings is an early step in the study of architectural development on a wider scale; and this brings us to a matter that closely touches the student of architecture who, not despising book-

knowledge, yet tries to read hishistory also from buildings themselves. Directly he begins to examine mediæval buildings he finds himself confronted with the outstanding fact that a very large proportion of examples have grown into shape, as we see them, by degrees, and through a course of time. That is to say, we frequently do not see the buildings as complete designs, but incomplete and complicated by expansion—or, perhaps, contraction. Their life-history has to be read. It is this that often renders the study of mediæval architecture from actual examples so bewildering to those who are uninitiated in the practice of building, and puzzling enough even to such students as are able to comprehend the processes of grafting on to and remodelling existing fabrics. References, of course, are made in the text to the fact of structural growth being evident in many of the examples; but in most instances the plans given are printed solid black throughout, notwithstanding. The teaching value of a plan must be raised by every added item of information that can be clearly conveyed on it, and the indicating of work of various dates in the building may prevent misreading and the drawing of false deductions. When we note how much misconceived designing of to-day is traceable to misreading of work of the past we cannot overlook the importance of trying by all available means to secure true reading, if only on this account.

That some of the plans figured in the book do not agree in various particulars with plans of the same subjects published elsewhere, may be no reflection on those here given. How rarely do published plans by different draughtsmen, purporting to illustrate identical buildings, agree in telling quite the same story! Nor does this apply only to plans. We still sadly need to have the majority of existing examples of old work faithfully rendered for us by authentic scale-drawings, as a basis for our studies in architectural history. Herein lies a field of architectural training. Learning crystallised into chapters and paragraphs of text-books can never supply the place of personal investigation of actual examples of building-work, in the training of architectural students, any more than can the study of the best of text-books take the place of dissection in another branch of human knowledge. Our hope for the future of the study of architectural history must mainly lie in the possibility of there arising a body of building-students, rightly trained in the way to learn by observation and comparison, who, as faithful investigators, may be able, by means of the searchlight of their ordered knowledge and acquired insight, to throw for us beams of light on the work of the past, illuminating dark parts and places in it, so that we may discern and read more and more of what was done, getting to see the true course of evolution, and thus attaining by degrees to an ever-clearer understanding of the real history of Architectural Development.

WALTER MILLARD [*A.*]

9 CONDUIT STREET, LONDON, W., *6th November* 1909.

CHRONICLE.

London County Council Architect's Department.

Since the duties of the London School Board were transferred to the Education Committee of the London County Council, the question of reorganising the work of the Education Architect's department has frequently been under consideration by the General Purposes Committee of the London County Council. The Committee recently reported that, after discussing a motion that a separate architect for educational purposes should be appointed, which on being put to the vote was lost, they decided that a sub-committee should consider the possibility of appointing an architect to discharge the duties of the Superintending Architect, and a separate architect to supervise the Council's architectural work. The sub-committee considered the matter, and reported that in their opinion it would be undesirable that the statutory and architectural work should be performed by different officers. At the request of the sub-committee the Superintending Architect prepared a report as to the methods by which he would undertake the supervision of the Council's educational architectural work in addition to his present duties. His proposal was to create a section, in the charge of an assistant architect, to perform the duties before carried out by the department of the Education Architect. To this officer the Superintending Architect would, while not disturbing the basis of this organisation, by which ultimate responsibility for the efficiency of the work must be borne by the head of the department, delegate certain work, apart from questions of principle, staff, departmental control, uniformity in methods of construction, and contingent action with other sections of the department. The Superintending Architect further stated that it would be his aim from the outset to disturb as little as possible consistently with efficiency the present organisation of the Education Architect's department, so that the work might run on without break or hindrance. The sub-committee reported that after very full consideration they were satisfied that the interests of the Council would best be served by

conforming to the principle which has before governed the formation of the several departments of the Council's service—namely, of allotting to one professional department the work which usually falls to that profession. They accordingly recommended that the educational constructional work be placed in charge of the Council's Architect. The General Purposes Committee endorsed this view, and at the meeting of the London County Council last Tuesday their recommendation was brought forward that, in view of the retirement of Mr. T. J. Bailey, the Education Architect, at the end of the year, the educational architectural work be placed, as from January 1, 1910, under the charge of the Superintending Architect of the Council, and that the staff of the Education Architect's department be likewise transferred.

Mr. W. H. Key, Chairman of the Building Sub-Committee of the Education Committee, moved as an amendment that the recommendation be referred back to the General Purposes Committee, with instructions, after conference with the Education Committee, to report as to the appointment of one chief officer to have control of the whole of the educational architectural work of the Council. Mr. Key read a manifesto signed by several London architects. The document stated that it was most undesirable that the structural and statutory architectural work of the Council should be carried out by one official, and that the evil would be greatly aggravated if the structural work of the Education Committee were thrown upon the department. That view, they believed, was also held by the majority of architects who had the future of London buildings at heart. The qualities which were required for the statutory work were not those which should be essential for the official having the design of the Council's various buildings under his charge, and they believed that the dividing of the work of the Council's Architect was the proper solution of the difficulty. The manifesto further stated that were not the meeting at which the protest was to be made so imminent its promoters believed that it would have been possible to have laid before the Council a formidable petition from architects bearing out this view.

The amendment, after a protracted discussion, was defeated by 62 votes to 33, and the General Purposes Committee's recommendation was then agreed to.

The Proposed "St. Paul's Bridge."

The Bridge House Estates Committee of the Corporation have submitted to that body a report relating to bridge accommodation in the City. In July last the Committee recommended that a new bridge should be constructed at an estimated cost of £1,646,983, and that the gradients of Southwark Bridge should be improved.

After that recommendation the Committee were instructed to reconsider the matter and to submit a further report. This they have now done, and on the question whether a new bridge is wanted they quote from the report of the Royal Commission on London Traffic. The Commission advocated the construction of two main avenues through London—one from east to west, and the other from north to south. Such a proposal involved the erection of a new bridge. The Bridge House Committee suggest the use of the thoroughfare leading from the General Post Office to Islington and Holloway.

The Committee, in re-presenting their report on the same lines as before, say that the suggested new bridge has been altered so far as the southern side is concerned. This alteration gives a straighter approach, but will result in a gradient of 1 in 40 as compared with their former plan of 1 in 45, and will make it necessary to raise the level of Southwark Street. They consider that the schemes which they suggest are the best means of dealing with the subject, and they are strongly of opinion that the Corporation should undertake the construction of a bridge out of the Bridge House revenues. They recommend the construction of a new bridge at a cost of £1,646,983, and they suggest that Southwark Bridge should be reconstructed at a cost of £261,000.

The report is signed by the Chairman (Mr. Deputy Algar) and 24 members of the Committee, one of whom, however, is opposed to the expenditure on the reconstruction of Southwark Bridge. A member of the Corporation has given notice of an amendment to reject that portion of the scheme which provides for the erection of a new bridge.

The Southwark Borough Council has decided to forward a copy of a report by the town clerk and engineer to the Bridge House Estates Committee with reference to the erection of the proposed new bridge and the widening and improvement of Southwark Bridge. The report suggested that the City Corporation, in making the new road to the new bridge, should provide for a widening of Union Street, between Great Guildford Street and Pepper Street, so as to secure a better approach to and from the Parcel Post Office in Orange Street to the new road. Also that definite assurances should be obtained from the City Corporation that the work of widening and improving Southwark Bridge would be immediately proceeded with on the completion of the new bridge and approach road.

The Re-erection of Crosby Hall.

The London County Council, at their meeting last Tuesday, confirmed a preliminary agreement which had been arrived at between the Local Government, Records, and Museums Committee of that body and the University and City Association of London (Limited) for the re-erection of the fabric of Crosby Hall on land adjoining More House, Chelsea. The agreement provides that the

Association shall convey to the Council a freehold site, and shall enter into a building agreement for the re-erection of the hall on such site, and for the re-erection on the adjoining land of buildings for collegiate purposes. The Council will grant the Association a lease of Crosby Hall when re erected for 500 years at a ground rent of £1, and will also grant a lease at £140 a year for the same period of the adjoining land. The hall will be open free to visitors during specified hours daily. The Association, however, will have power to close the hall temporarily for the purpose of exhibitions. The foundations of the building have been already laid, and it is understood that within two or three weeks the actual fabric will be in course of erection.

The Statutory Examinations.

Examinations of Candidates for the offices of District Surveyor under the London Building Act, and of Building Surveyor under Local Authorities, held by the Institute pursuant to Statute, took place on the 14th and 15th ult. Of the eight candidates admitted, the following three passed, and have been granted by the Council Certificates of Competency to act in the respective offices, viz.:—

For the Office of District Surveyor in London.

Baxter Greig [*A.*], 183 East Dulwich Grove, Dulwich, S.E.
John Hatton Markham [*A.*], 2 Gray's Inn Square, W.C.

Building Surveyor under Local Authorities.

Reginald Guy Kirkby [*A.*], City Architect, Bradford.

The Angel Steeple, Canterbury.

The Times of the 4th inst. publishes the following from Mr. W. D. Caröe, F.S.A. [*F.*] :—

An interesting matter, hitherto of conjecture only, but deserving of wider circulation than the columns of the technical journals, has just been finally set at rest in connection with the great supporting piers of the central tower of Canterbury Cathedral. The late Professor Willis was the first to suggest that the present tower piers—belonging in appearance to Archbishop Chicheley's work—might possibly enclose within them the original Norman tower piers of Lanfranc's construction. Some five years ago I gave grounds for a more certain belief in this supposition. Conjecture has now been made certainty during the progress of the important work recently undertaken of repairing the somewhat ominous and now quite explicable fissures in the piers in question.

The present piers prove to be a shell of masonry, from nine inches to a foot thick, with the space between it and the Norman piers filled up with rubble. This rubble seems to be separated from the Norman work by a clear space about half an inch wide, as though a wooden core had been purposely used round the old pier and withdrawn as the new work went up.

It is obviously impossible to make any extensive exploration, but in the small space exposed the Norman work shows, curiously enough, no sign of whitewash or paint.

It is perhaps not generally known that in raising the present tower the mediæval builders with great skill kept the ancient tower in position and wove it in with the new work. At the same time they executed the somewhat surprising feat of raising the level of the supporting arches about twenty feet. While sometimes apt to take undue risks, as in their method of constructing these composite piers, their engineering skill and daring was by no means contemptible.

The discovery of these original tower piers of Lanfranc, and the recent disclosure of the singularly interesting wall paintings, dating from Anselm's time, in the ruined Infirmary Chapel, add further interest to this remarkable fabric, and may serve to remind the faithful that the Dean and Chapter are still in need of many thousands of pounds to make secure and to hand down the Metropolitan Cathedral to succeeding generations.

Reinforced Concrete in Fire.

An interesting report on the fire-resisting qualities of reinforced concrete has just been made by an adjuster for an insurance agency in Chicago. A building of this construction at South Elgin, Illinois, used for the manufacture of drugs, was recently subjected to such a fire that a total loss was claimed. It was contended by the adjusters that the concrete floors and ceiling were not sufficiently damaged to warrant their demolition, but the owner claimed that the concrete had been weakened by the intense heat, about 60,000 lb. of drugs having been consumed. It was finally decided to test the building by putting a weight of 400 lb. to the square foot on the panels, and it was agreed that they should be held defective if they deflected more than three-sixteenths of an inch, that having been the original test made by the architects when the building was turned over to the owners. Tests were made of eight panels involved in the fire, and all of them showed considerably more than three-sixteenths of an inch deflection when only 250 lb. to the square foot had been placed upon them. The same weight was applied to other panels of the building not affected by the fire, and the deflection was shown to be less than one-tenth of an inch. As a result of the test a total loss was allowed on six panels and a compromise effected on two panels. It was held by the adjusters that had the building been of any other construction than concrete it would have been totally destroyed on account of the great heat engendered by the burning of the drugs and chemicals. The conclusion reached was that the weakening of the concrete was caused by the expansion of the steel reinforcement under the intense heat.

The Illuminating Engineering Society.

The opening meeting of the above Society will take place on Thursday, 18th November, at 8 p.m., at the premises of the Royal Society of Arts (18 John Street, Adelphi), when a brief report of the progress of the Society will be presented by the Hon. Secretary, and the Inaugural Address will be delivered by Professor Silvanus P. Thompson, D.Sc., F.R.S., the first President of the Society.

COMPETITIONS.

Warrington Elementary School Competition.

Members of the Royal Institute of British Architects are requested not to take part in the above competition.

By order of the Council,
IAN MACALISTER, *Secretary.*

26th October 1909.

CORRESPONDENCE.

THE R.I.B.A. SCALE OF CHARGES.

[JOURNAL, 25th September, p. 742; 16th October, p. 770.]

To the Editor JOURNAL R.I.B.A.,—

SIR,—Upon this subject I omitted to mention a point not without importance, and which appears to have been omitted also, probably from being overlooked, from the Institute Scale of Charges, that of a somewhat definite charge or charges for general correspondence and interviews. I am not referring of course to either correspondence or interviews which are necessary to carrying out a certain work, and which of course would be included in the Scale of Charges incidental to that class of work, but to both correspondence and interviews which take place over a variety of matters in giving advice to clients upon building operations generally, and to which there may be no specific issue. I made the acquaintance of an architect once—and, as I am writing impersonally, I will not mention any names—whose practice it was to charge five shillings for receiving and replying to an ordinary business letter, although some letters of course might take an hour or two to obtain the necessary information and a more extensive charge might then be made. I have forgotten what this man of business usually charged for an interview, but I think it might safely and reasonably be based upon a charge of one guinea per hour, so that an ordinary interview of fifteen or twenty minutes would be charged at five shillings. It is strange that this aspect of an architect's account, which looms so large in that of a solicitor's bill, should have escaped the attention of the R.I.B.A.; but if the Institute has the intention of applying to Parliament to legalise the charges of architects then it is highly essential that they should be as clearly defined as possible. As an illustration of this particular point a lady client called upon me from the country in the early part of the week before last and occupied two hours of the day from 12.30 to 2.30 discussing a building project, and made another appointment for the end of the week, when the heart of another day was spent upon the same project. No definite course of action resulting therefrom, what is the charge to be? Now as the Institute Scale of Charges does not respond in self-defence, then I think judgment must be entered against the R.I.B.A.

So that there are at least five important matters which require defining and clearing up before the R.I.B.A. makes any application for additional powers:

1. The charge for works not exceeding one thousand pounds; for which I have suggested a charge of ten per cent. for the first five hundred pounds, and seven and a half per cent. for the second five hundred pounds, and pro rata.

2. For works exceeding one thousand pounds: for the first thousand pounds as above, and for each subsequent thousand pounds of outlay six per cent., which is in accordance with the American system of the charges of architects.

3. For all structural alterations and additions to old buildings a uniform charge of ten per cent.

4. Working drawings and details, one and a half per cent., or pro rata if not complete.

5. Definite charges for ordinary interviews and correspondence other than those referable to one of the scale charges.

No doubt other matters, like the point brought forward by an Associate, require consideration, and when the Scale of Charges comes before the Institute for discussion, as it must, will receive the attention of the Institute.

The necessity for sub-contracts is too well known to call for discussion, and the responsibility should be brought right home for good, bad, or indifferent work, or for delays in connection therewith, upon the shoulders of the sub-contractor.

Yours faithfully,
A FELLOW.

"THE CHURCH ORGAN"

[JOURNAL 16th October, p. 768.]

1 *Camp View, Wimbledon Common*: 17*th October.*

To the Editor JOURNAL R.I.B.A.,—

SIR,—Mr. Cliffe condemns my suggestion for a west-end organ and the choir in the nave as unpractical. He is possibly not aware that the arrangement has much more than my personal recommendation to back it. A good many years ago a joint committee of architects and organists was formed (I believe at the instigation of the Institute) to consider and report as to the best position for the organ in churches, and the Report was in favour of the suggestion I have now repeated. That Report must exist somewhere in the archives of the Institute.*

Anyone can judge of the effect for himself by attending service at Lincoln's Inn Chapel, where the organ and choir are placed in the manner I have described.

H. H. STATHAM.

* "Report of the Committee for Architectural Arrangements affecting Musical Requirements in Churches," JOURNAL OF PROCEEDINGS R.I.B.A. 28th May 1891. The Report also appeared in the several issues of the Institute KALENDAR from 1895 to 1900.—ED.

THE SITE OF THE GLOBE THEATRE OF SHAKESPEARE ON BANKSIDE AS SHOWN BY MAPS OF THE PERIOD.

By George Hubbard, F.S.A. [*F.*].

IT is difficult, if not impossible, to follow the reasoning which is advanced by various parties who appear to be anxious to locate the position of the Globe Theatre, without more complete evidence than has yet been produced. Even at the risk of making confusion worse confounded, I should be glad to put forward the evidence of the maps of the period. It is the contemporary evidence which alone has value, and I am anxious to confine myself within that limit.

The first point, however, to be settled is—When was the Globe Theatre built? In a contract, dated January 1599, for building the Fortune Theatre, the Globe Theatre is referred to as "the late erected playhouse on the Bancke."* The theatre was therefore built shortly before 1599.

Sir Henry Wotton, writing in 1613, recounts that on St. Peter's Day, 29th June, of that year "the Globe Theatre was burnt to the ground." John Chamberlain, writing in July 1613, refers "to the burning of the Globe or Play House on Banksid on St. Peter's Day." This contemporary evidence settles the date when the theatre was burnt.

Taylor, the Water Poet, in his work published in 1630 says:

> "As gold is better that in fire's tried,
> So is the Bankside Globe that late was burn'd."

It is clear that the Globe was rebuilt on Bankside; but, apart from this, in the Calendar of State Papers, Domestic Series, of the Reign of James I., 1619–1623, preserved in the State Department of His Majesty's Public Record Office, there is a grant dated 27th March 1619 to John Hemmings, Rice Burbage, Hen. Condale, John Lowen, Nick Tooley, John Underwood, Nathan Field, Robert Benfield, Rob. Gough, Wm. Ecclestone, Rice Robinson and John Shanks, and their associates, of license to act comedies, tragedies, histories, &c., for the solace and pleasure of the King and his subjects at the Globe, Bankside, co. Surrey.† From this it is clear that the Globe Theatre was rebuilt on Bankside some time between 29th June 1613, when the theatre was burnt down, and 27th March 1619, when the grant was made to several of Shakespeare's associates and friends to play in the new theatre.

Having thus definitely fixed certain dates, it is particularly interesting to see what the old maps show. To my mind they reveal a good deal of unwritten history in connection with the pleasure resorts on the south side of the Thames. The first map (Illus. A), by Ralph Agas (*circa* 1560-1570, and therefore earlier than the building of the first Globe Theatre), shows "the bolle bayting" ring; the bull being baited by a dog may be seen in the ring. This circular "bolle bayting" ring stands close behind some houses which front upon "The Banck." Evidently this bull-baiting ring stands within its own grounds, and the dog-kennels with the dogs dashing out of them may be seen on the east and west sides of the plot of ground. Lying to the west of the bull-baiting ground is a garden with four rectangular ponds, and on the east of the bull-baiting ground is a narrow garden containing three rectangular ponds. On the east of this narrow garden is "the beare bayting" ring, a similar structure to "the bolle bayting" ring. The plot of ground containing the "beare bayting" ring has kennels on its east and west sides, from which the dogs are dashing out in precisely the same way as they are doing in the "bolle bayting" garden. The "beare bayting" ring stands just behind some small houses fronting upon "The Banck." Hedges apparently enclose the various gardens. Lying to the east of the "beare bayting" garden are more small gardens attached to some small houses, some of which are fronting upon "The Banck" and others fronting upon a road which has an open ditch or sewer down its centre. A tree stands on either side of this ditch or sewer.

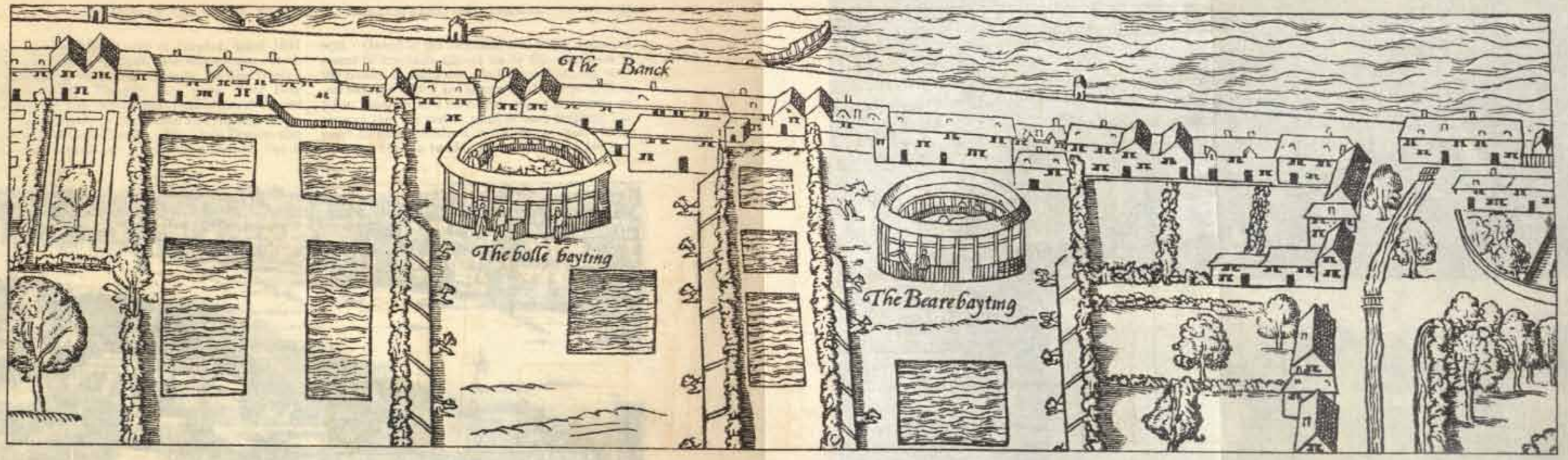
By reference now to C. J. Visscher's "View of London," dated 1616 (Illus. B), it is apparent that some important changes have taken place within the half-century that has elapsed between the preparation of these two maps.

The old wooden "bolle bayting" and "beare bayting" rings have disappeared; and in the place of the circular wood "bolle bayting" ring an octagonal structure appears, which is now called "The Bear Gardne." This new structure does actually stand on the very site of the "bolle bayting" ring. Popular taste may have been in favour of bear baiting rather than bull baiting; hence the change.

Visscher shows on the extreme west the same rectangular ponds. The dog-kennels may be seen on the west of the bear garden; the narrow garden on the east is somewhat hidden in the thick hedgerows which appear to have grown into large trees during the last fifty years. To the east of the narrow garden where formerly stood the circular wooden "beare bayting" ring we now find another octagonal structure, occupying precisely the same site. This octagonal building is "The Globe" Theatre, as it was rebuilt after the fire in 1613. The evidence is perfectly clear and undeniable. The Globe Theatre stood immediately behind the row of houses which fronted upon Bankside, and upon the very site of the old "beare bayting" ring.

The evidence of these maps, though conclusive as it is, may be carried still further. By refer-

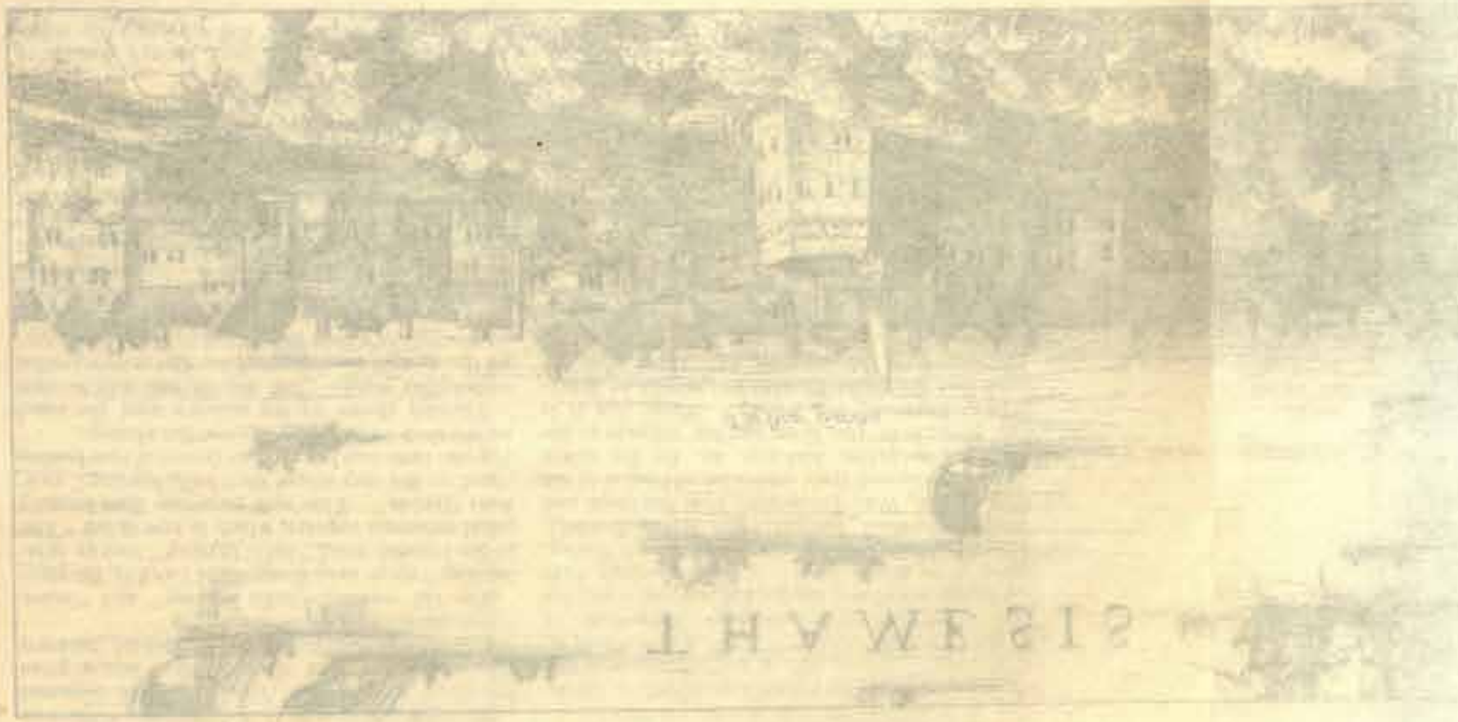
* *Gentleman's Magazine*, June 1866, vol. lxxxvi. p. 113.
† Sign Manual, vol. x. No. 1.

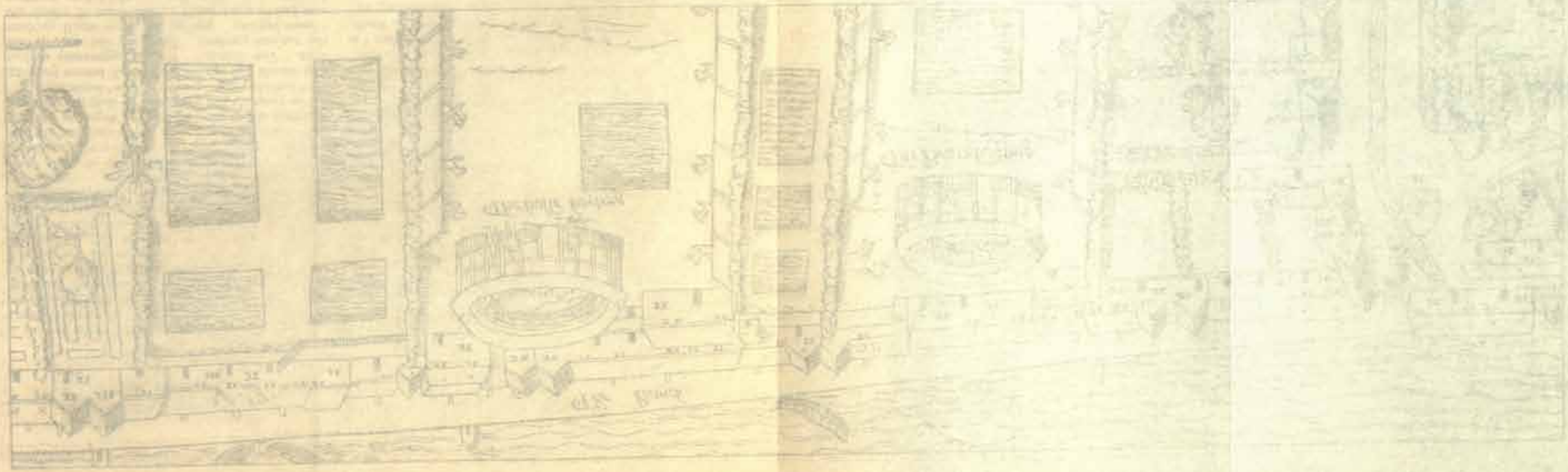


ILLUS. A.
PLAN OF LONDON (CIRCA 1560-1570) BY RALPH AGAS.



ILLUS. B.
VISSCHER'S VIEW OF LONDON (1616).





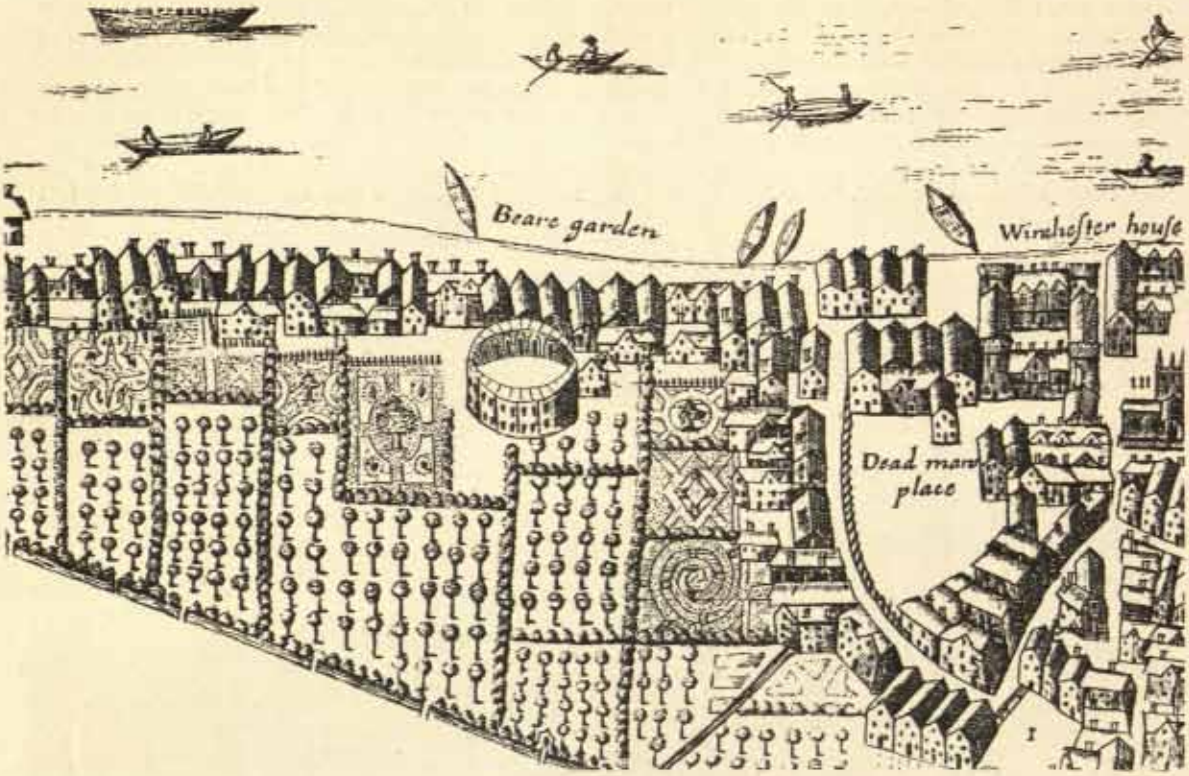
ence now to Hollar's view of London, dated 1647 (Illus. C), further changes have taken place. Both the octagonal structures—namely, the Bear Garden and the Globe Theatre—have gone. The Bear Garden has been rebuilt as a circular structure, and lies considerably to the south and slightly to the east of the Globe Theatre. The Globe Theatre also has been rebuilt as a circular structure, but it rays. Owing to the increased size of the theatre, it seems to encroach almost on to the rear walls of the houses of Bankside; but throughout the various changes which are shown by the maps to have taken place on this historical site, it is curious to observe that the centre point of each building appears to have remained on the same spot. Ultimately I hope to be able to show within a few feet



Illus. C.—From Hollar's View, 1647.

maintains its old position, and stands as before immediately at the back of the houses which we know fronted upon "The Banck," *i.e.* Bankside.

It is apparent that this Globe Theatre has been built on a larger scale than its predecessors. It still remains an hypæthral building, though a portion is covered by a roof which doubtless protected the stage. The stage apparently was on the southern side of the theatre, and its roof no doubt shaded the eyes of the spectators from the sun's where that centre spot was situated. The "Beere bayting h.," which has been rebuilt to the south and slightly to the east of the Globe, appears to be standing at the corner of a road running parallel to the Thames in a westward direction. This road can hardly be any other than "Made Lane" in Morden and Lea's Map, 1682 (Illus. E). Made Lane is now Park Street, of which the word "Street" alone appears in the portion here reproduced of the Ordnance Survey (Illus. G). The

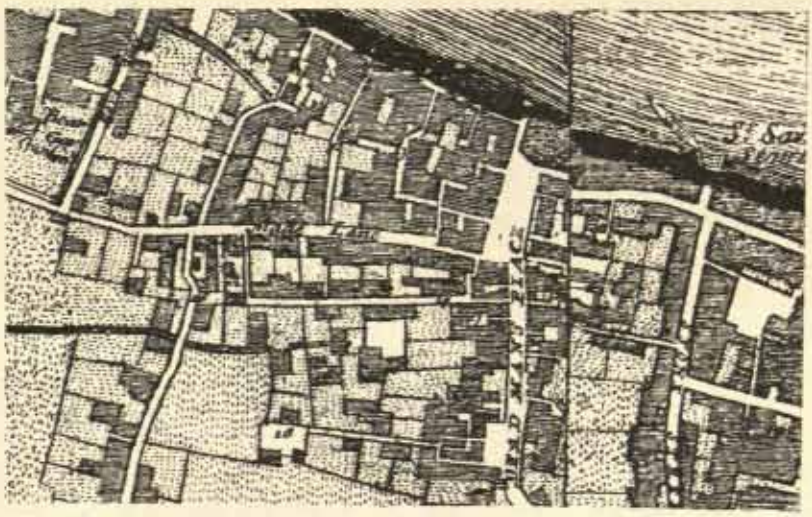


Illus. D.—From Wm. Faithorne's "Exact Delineation of the Cities of London and Westminster and the Suburbs, 1658."

other road to which the "Beere bayting h." fronts is doubtless the same that Agas and Visscher (Illus. A and B) show with the open ditch or sewer down its centre, and which I shall presently show to be "Bank End."

To complete the history from the maps. It appears from William Faithorne's map, 1658 (Illus. D), that the Globe Theatre has been converted back again into a "beare garden," and other places of amusement have vanished from that particular locality.

In Robert Morden and Phil. Lea's Prospect of London and Westminster, dated 1682 (Illus. E), there is no sign even of the "Beare Garden."

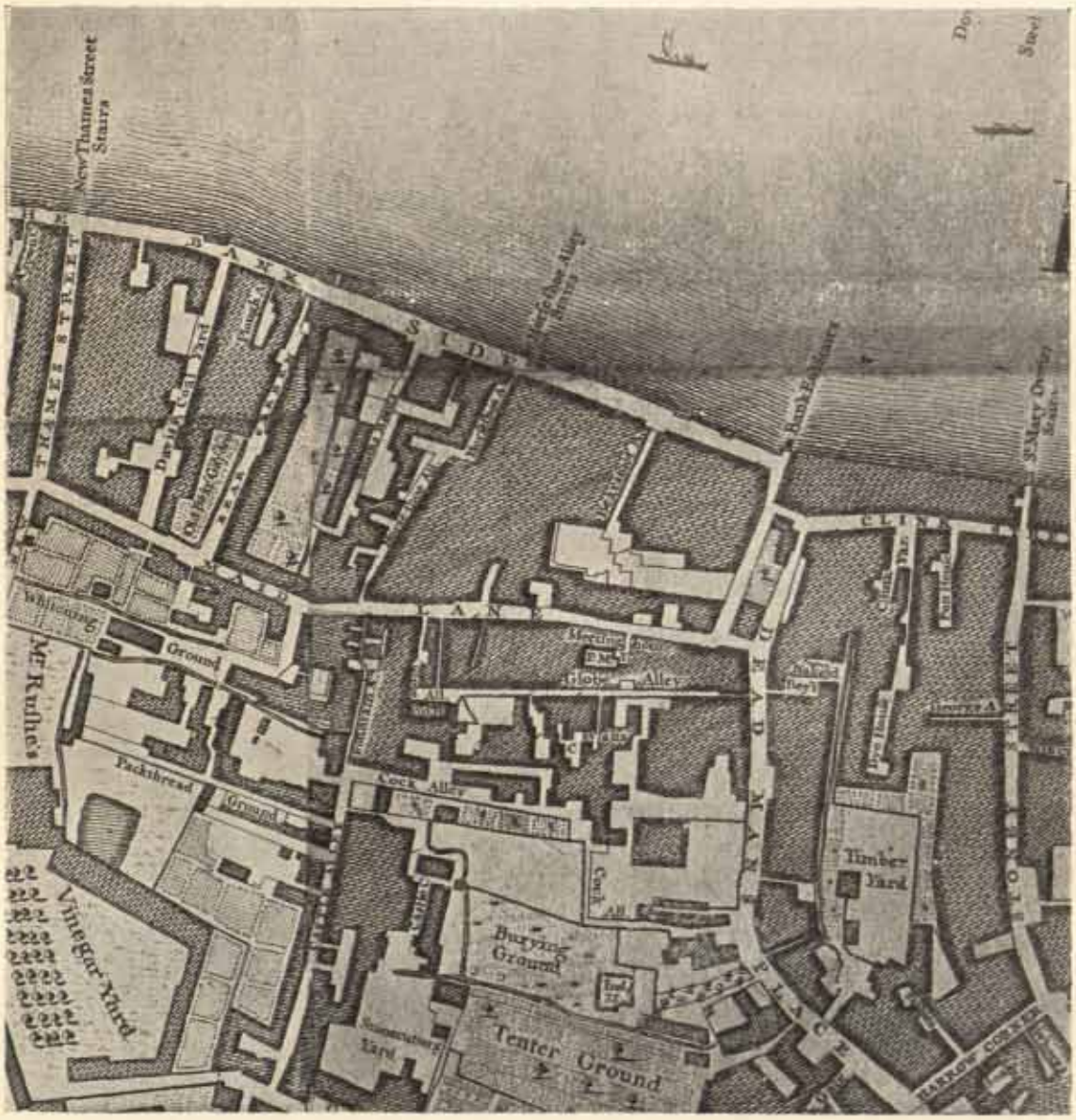


Illus. E.—From Robt. Morden and Phil. Lea's Prospect of London and Westminster, 1682.

To determine the position of the Globe Theatre on Bankside, reference has been made to the road with the open ditch or sewer, shown both in Agas's plan of London, 1560–1570 (Illus. A), and Visscher's view of London, 1616 (Illus. B).

appear in Visscher's view of London, 1616 (Illus. B), is still standing in Rocque's map of 1746 (Illus. F).

Now that this road in Visscher's view of London is known to be Bank End, it becomes an easy



Illus. F.—From Rocque's Plan of London, 1746.

In Rocque's plan of London, published in 1746 (Illus. F), Bank End stairs leading into the river are shown; the road in question is therefore Bank End, from which Bankside is approached on the west as at present. The open ditch or sewer has been closed in, but one of the two trees which

matter to estimate approximately how far west of Bank End stood the Globe Theatre. It will be seen on Visscher's view of London that the Globe Theatre is immediately at the back of the fifth, sixth, and seventh houses on Bankside, numbering the houses from Bank End in a westward direction.

The fifth house appears to have about twice the frontage of either the sixth or seventh house.

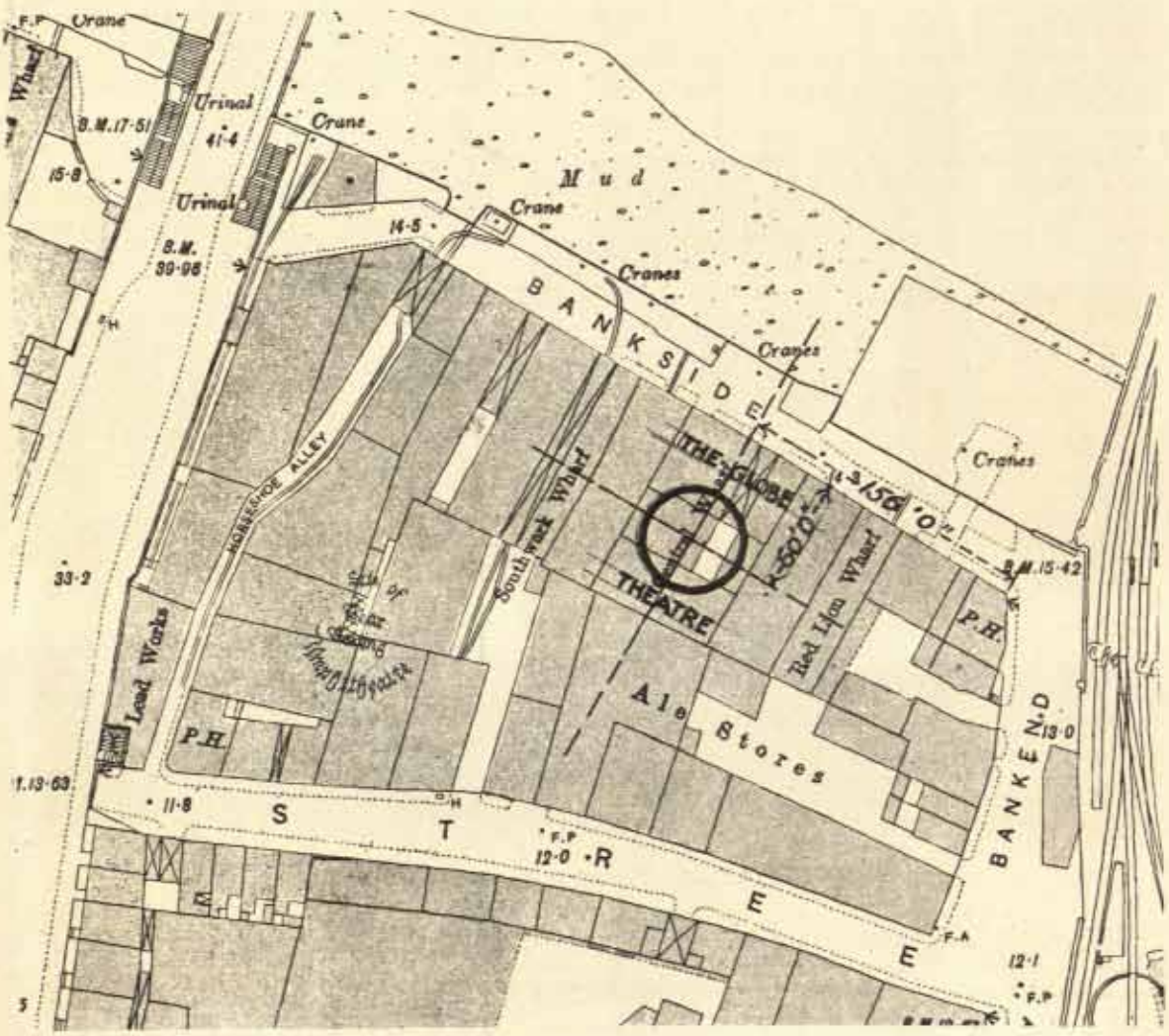
Approximately these frontages appear to be:—

House No. 1	. .	38 feet.
2	. .	42 "
3	. .	14 "
4	. .	16 "
5	. .	46 "
		156 "

This shows that the north and south central axis of the theatre was about 156 feet west of Bank End. Judging from the same map, I estimate that the east and west axis of the theatre would be about 60 feet south of the fronts of the houses on Bankside.

This estimate that the centre of the theatre is about 60 feet south of the fronts of the houses on Bankside must be fairly correct. The radius of the theatre appears to be about 20 feet, and there appears to be a space of perhaps 15 feet between the theatre and the backs of the houses on Bankside; the depth of the houses from front to back appears to be about 25 feet. This gives a total of 60 feet between the fronts of the Bankside houses and the east and west axis. But this estimated distance of 60 feet can be checked by estimating the frontage of the houses on the west side of Bank End. By examining Visscher's map it will be seen that there are some four or five houses having a total frontage of about 100 feet. On the south of these houses it may be seen that there is a way or lane, running east and west, leading from Bank End to the theatre, which stands somewhat to the north of this way or lane.

These figures cannot be wrong by more than a



Illus. G.—Ordnance Survey, 1894-96, showing position of the Globe Theatre as plotted by the Author of the present article.

very few feet in either direction, and the point of intersection of the axes of a circular building must determine the centre point of this theatre which has a geometrically regular plan. In accordance with the foregoing evidence I have plotted the site of the Globe Theatre on the Ordnance Survey map of 1894–96 (Illus. G). This is the latest Ordnance survey of this locality, and though some of the buildings have been pulled down, and others erected on Bankside, the frontage line of the new buildings has not been altered.

The contemporary authors so constantly refer to the theatre as being on Bankside that in all probability there must have been an approach to the theatre from this roadway. If so it must have been through an archway under the Bankside houses; but in Visscher's view (Illus. B) the theatre hides the lower portions of the houses, and in consequence it is impossible to speak with any assurance. But if a reference is made to Agas's Plan of London (Illus. A) it will be seen that in the house immediately above the animal emerging from the hedge there is an archway giving access from "The Banck" to "The Beare bayting" ring.

Two years ago I carried out some buildings on this particular site where the Globe Theatre formerly stood, and I came across old foundations, and I also found a considerable amount of pottery. Some jars are almost perfect, and with the pottery I found some green glazed tiles with a design in high relief.

My uncle, the late Sir John Evans, the father of our Gold Medallist, saw this pottery and the green glazed tiles, and he at once said they all belonged to the Elizabethan period, and I think that no one was better qualified than he to give an opinion.

The main point, however, that I wish to show is, that from a careful inspection of the maps alone it is quite possible to locate definitely the position of the Globe Theatre. The maps confirm and check each other with curious accuracy, and if reliance is placed upon them it is impossible to come to any other conclusion than the one I have attempted to expound.

It seems to me that the only possible refutation of the conclusion I have drawn would be to challenge the accuracy of the maps which are published with this article, and it would be also necessary to disprove the accuracy and reliability of others to which no reference has been made.

My thanks are due to the Topographical Society for their kind permission in allowing the reproduction of some of the maps, and to the staff of the Guildhall Library for having brought under my notice the writings of contemporary authors who have referred to the Globe Theatre on Bankside.



OBJECTS FOUND WHEN EXCAVATIONS WERE MADE ON THE SITE OF THE GLOBE THEATRE.

MINUTES. I.

At the First General Meeting (Ordinary) of the Session 1909-10, held Monday, 1st November 1909, at 8.30 P.M.—Present: Mr. Ernest George, *President*, in the Chair; 63 Fellows (including 18 members of the Council), 44 Associates (including 4 members of the Council), 5 Hon. Associates, and numerous visitors, the Minutes of the Business Meeting of the 7th June and the Special Meeting of the 10th August were taken as read and signed as correct.

The Hon. Secretary, Mr. Henry T. Hare, announced the decease of the following members: Nathan Solomon Joseph [*A.* 1863, *F.* 1890], Frederick Hyde Pownall [*A.* 1857, *F.* 1860], Henry Stock [*F.* 1885], Don José Urioste y Velada [*Hon. Corr. M.* Madrid, 1905], Frederick Henry Williams [*A.* 1878], John Wornham Penfold [*A.* 1860, *F.* 1881], John Archibald Campbell [*F.* 1906], William Owen [*A.* 1879], Henry Hall [*A.* 1861, *F.* 1878], Auguste Choisy [*Hon. Corr. M.* Paris, 1889, *Royal Gold Medallist* 1904], and Charles Follen McKim [*Hon. Corr. M.* New York, *Royal Gold Medallist* 1903].

Making special reference to M. Auguste Choisy and Mr. Charles F. McKim, Mr. Hare said their names were know throughout the profession in all parts of the world, and the feeling would be shared by every member of the Institute that the profession had suffered a very great loss by the death of these distinguished members.

The following candidates for membership, found by the Council to be eligible and qualified according to the Charter and By-laws, were nominated for election—viz.: As FELLOWS (4): Henry Ascough Chapman [*Associate* 1895] (Leeds); William Curtis Green [*Associate* 1906]; Arthur Benison Hubback [*Associate* 1905] (Selangor, Malay States); Richard Henry Weymouth [*Associate* 1889]. As ASSOCIATES (77)*: Percy Tidswell Adams [*Probationer* 1900, *Student* 1906] (Bournemouth); Herbert Cooper Anderson [*Probationer* 1898, *Student* 1905] (Heywood, Lancs.); William Charles Antcliffe [*Special Examination*]; Benjamin Vincent Bartholomew [*Probationer* 1905, *Student* 1906]; William Bell [*Probationer* 1905, *Student* 1907] (Dundee); Alan Binning [*Probationer* 1902, *Student* 1905]; Henry Boddington, jun., M.A.Oxon [*Probationer* 1905, *Student* 1906]; Albert Henry Boss [*Probationer* 1904, *Student* 1907]; Frederick Henry Brazier [*Probationer* 1904, *Student* 1906] (Altrincham); Christopher Bristow [*Probationer* 1904, *Student* 1905]; Wilfred James Brough [*Probationer* 1902, *Student* 1904]; Peter Caminesky [*Probationer* 1903, *Student* 1905] (Manchester); Herbert Carnelley [*Probationer* 1901, *Student* 1904]; Charles Denny Carus-Wilson [*Probationer* 1904, *Student* 1908]; William D'Arcy Catheart [*Probationer* 1906, *Student* 1908]; Gilbert Scott Cockrill [*Probationer* 1901, *Student* 1906] (Great Yarmouth); Harry Courtenay Constantine [*Probationer* 1906, *Student* 1907]; Vincent Corbet Cook [*Probationer* 1898, *Student* 1901] (Wolverhampton); Claude Russell Corfield [*Probationer* 1902, *Student* 1905] (Birmingham); John Love Seaton Dahl [*Probationer* 1901, *Student* 1902]; William Francis Dickinson [*Probationer* 1902, *Student* 1904]; Edwin James Dod [*Probationer* 1901, *Student* 1903] (Liverpool); Albert Lionel Edwards [*Probationer* 1906, *Student* 1907]; Alfred Hewlett Edwards [*Probationer* 1901, *Student* 1907]; James Straton Ferrier [*Probationer* 1903, *Student* 1907] (Edinburgh); George Edmonds Fitzgerald [*Probationer* 1905, *Student* 1906] (Cape Town, S.A.); Herbert Sidney Fleming [*Probationer* 1904, *Student* 1906]; Charles Alfred Geen [*Special Examination*]; James Grieve [*Probationer* 1904, *Student* 1906, *Qualified* June 1908] (Liverpool); Reginald Fowler Gutteridge [*Probationer* 1901, *Student* 1904] (Southampton); Frederic William Hagel [*Probationer* 1905, *Student* 1907]; William Haigh Harral [*Probationer* 1903, *Student* 1905, *Colonial Examination* 1908] (Adelaide, S. Australia); David Harvey [*Probationer* 1903, *Student* 1908] (Hull); Roland Hotz [*Probationer* 1906, *Student* 1907] (Simla, N.W. India); John Weston Jarvis [*Probationer* 1900, *Student* 1901]; John Mansell Jenkinson [*Probationer* 1899, *Student* 1905] (Sheffield); Alfred Romeo La Gerche [*Colonial Examination* 1908] (Melbourne); William Kaula [*Probationer* 1905, *Student* 1907]; Herbert Kenchington [*Special Examination*]; William Henry Ludlow [*Probationer* 1889, *Student* 1907] (Northampton); Thomas Younger Lusk [*Special Examination*] (Dunedin, New Zealand); Archibald John McLean [*Probationer* 1904, *Student* 1907] (Montreal); Charles Stanbury Madeley [*Probationer* 1904, *Student* 1906] (Birmingham); John Thomas Mair [*Special Examination*] (Wellington, N.Z.); Francis John McCullum Maxwell [*Probationer* 1905, *Student* 1906] (Cape Town, Cape Colony); Wilfrid Law Mellor [*Probationer* 1902, *Student* 1904] (Manchester); Cecil Broadbent Metcalfe [*Probationer* 1902, *Student* 1905] (Bradford); George Arthur Mitchell [*Special Examination*]; Herbert William Mole [*Probationer* 1904, *Student* 1907] (Newcastle-on-Tyne); Ernest Edmond Morgan [*Probationer* 1905, *Student* 1908] (Swansea); Henry Seton Morris [*Special Examination*]; Ernest Scott Petch [*Probationer* 1901, *Student* 1905] (Scarborough); Harold Milburn Pett [*Probationer* 1902, *Student* 1905] (Brighton); Robert Pierce [*Probationer* 1904, *Student* 1905]; Ernest Marston Powers [*Colonial Examination* 1908] (Melbourne); William Sydney Purchon [*Probationer* 1905, *Student* 1907] (Sheffield); Sydney Herbert Rainforth [*Probationer* 1898, *Student* 1901] (Lincoln); Charles Holland Rose [*Probationer* 1904, *Student* 1906]; Hugh Alexander Ross [*Probationer* 1904, *Student* 1907]; Harold Selwood Sawyer [*Probationer* 1900, *Student* 1903] (Kent); Henry Edward Seecombe [*Probationer* 1900, *Student* 1904]; Joseph Seddon [*Probationer* 1906, *Student* 1907]; Henry Percival Shapland [*Probationer* 1906, *Student* 1907]; Cecil Hamilton Simpson [*Probationer* 1904, *Student* 1905]; Frederick Radford Smith [*Special Examination*]; Douglas William Stewart [*Probationer* 1902, *Student* 1907]; William Watt Tasker [*Probationer* 1903, *Student* 1907] (Newcastle-on-Tyne); Albert Turnbull [*Probationer* 1904, *Student* 1906] (Durham); Henry Unwin [*Probationer* 1900, *Student* 1904] (Wigan); George Vey, jun. [*Probationer* 1907, *Student* 1908]; Herbert Waller [*Special Examination*] (Simla, Punjaub); Herbert Gordon Warlow [*Probationer* 1902, *Student* 1905]; John Douglas Dickson Watt [*Probationer* 1902, *Student* 1906] (Falkirk, N.B.); Geoffrey Hyde Williams [*Probationer* 1898, *Student* 1903] (Windsor); John Bertram Wills [*Probationer* 1902, *Student* 1904] (Bristol); George Christopher Wingrove [*Probationer* 1904, *Student* 1906] (Shanghai, China); John Girtrig Young [*Probationer* 1903, *Student* 1905] (Edinburgh). As HON. ASSOCIATE: Frederick William Pomeroy, A.R.A.

The Secretary read the names of the candidates who had passed the October Statutory Examinations held by the Institute under the London Building Act.

The President delivered the OPENING ADDRESS of the Session, and at the conclusion thereof invested Dr. Arthur John Evans, F.R.S., with the Royal Gold Medal awarded him in recognition of the services he has rendered the history of architecture by his distinguished work of exploration in Crete.

Dr. Evans having given the Meeting a summary, illustrated by lantern-slides, of a Paper he is preparing for the Institute on "The Palace of Knossos as a Sanctuary and the 'Miniature' Frescoes," a vote of thanks, moved by Dr. George Macmillan, and seconded by Mr. George Hubbard, F.S.A. [*F.*], was passed to the President and to Dr. Evans by acclamation.

The proceedings then closed, and the Meeting separated at 10.45 P.M.

* Except where otherwise stated all the candidates passed the qualifying Examination in June last.

ALLIED SOCIETIES.

Manchester Society of Architects.

The opening meeting of the Session of this Society was held on the 13th October, when the following Address was delivered by Mr. P. S. Worthington, M.A.Oxon. [*F.*], *President*:—

GENTLEMEN,—To-night you place me in the full dignity of the Presidential Chair, and I wish to thank you for the honour that you have done me in electing me your President. I feel that it is indeed a great honour as it is also a great responsibility, and it is with a full knowledge of this responsibility and of the difficulty of worthily succeeding many able Presidents that I say that I will do my utmost to further the interests of this Society and its members, and spare no time or trouble in the conduct of its business.

We are all critics, and criticism is easier than achievement. It is obviously right that we should be critics, provided that we do not stop there, because genuine and thoughtful criticism implies some sort of standard or ideal; but one of the truest conditions of just criticism is sympathy, and it is, I think, Professor Reginald Blomfield who says, in effect, that before you can justly criticise a building or any work of art you must realise for yourself the temperament and limitations of the artist. You will none the less place the work in its proper niche, but you will not necessarily mete out blame for failure of full attainment.

We, as a Society, pay visits to buildings of many kinds. We criticise freely among ourselves and learn a good deal of what to do and what to avoid. Have we possessed ourselves of those faculties which Lord Morley in his address to the University the other day put in the forefront of the characteristics of a true education—the faculty of sifting evidence and of knowing how far circumstances limit the application of abstract principles?

One has sometimes come away from a building feeling uncharitable, and at the same time wondering whether judgment has been fair, and what particular sort of mess one would have made of it oneself, considering obvious conditions and limitations. Are we ever satisfied? Do we ever find the Ideal?

The absolute ideal is a conception so impossible to grasp, so elusive of the highest human endeavour, receding further the higher we mount, that we can only express ourselves in a loose way when we come to discuss a working philosophy. And therefore when I speak of "Ideals" instead of "the Ideal" you will understand what I mean. Every man must build up his own ideals, and, for practical purposes, we must take life not so much as dominated by one fixed and absolute ideal, as by a number of ideals which, taken together, form a goal towards which the struggle is being made, a goal which varies with the mental and moral standpoint of the individual, and which alters not only in the experience of the individual but of the community. The ideal attained to-day is only the jumping-off point of to-morrow as increased knowledge and insight open up fresh goals for which to strive. It is finely put that Alberti and Peruzzi were men "ever memorable because their intellectual horizon lay far away among the great spaces of the ideal." And so it must be with any great artist. He climbs on heights that the ordinary man can never reach and can hardly realise. All that can be done is to follow as near as may be.

The attitude of the architect is (or should be) eminently that of the idealist, and depends upon many things—upon accidents of country, surroundings, birth, education, association, and upon the use to which his character and breadth of outlook enable him to put his natural gifts. To maintain ideals is not always easy in practice, and it is essential to distinguish principles and ideals from mere matters of personal preference and from mere catchwords of fashion.

If you asked me to name the most important function of a Society like ours, I should say that it was to raise the ideals of the profession to higher levels year by year—ideals of art, of professional practice, of sympathy and common help. I believe that the Mills bequest has had, and will have, a most important effect in this way, and that meeting and discussion on all these subjects in these rooms is invaluable, and to be prized and used by every member of the Society as largely as possible. "Work of each for weal of all" is an excellent motto.

The very fact that you have a Council and a large number of Committees constantly giving their time and work—and the demand on both grows greater every year—is evidence of the fact that, at any rate, a considerable number are willing to further the ends of the Society. A good deal of this work is of a difficult and delicate nature. Take, for instance, that connected with competitions. Now, I do not defend the competitive system. For the most part it seems bad and wasteful. I do not think that it is advantageous to the public, and in nine cases out of ten it is clearly degrading to architecture, for the best architecture has seldom a look-in in a competition. On the other hand, if architects can persuade themselves that the result justifies the devotion of brains, money, and time, they will of course continue to compete, and the only thing to do is to see that the conditions under which competitions are held are fair to all concerned, that the promoters get the best result, and that architects are not exploited. I have competed often enough, won sometimes and lost often. I know that it is only a considerable success that justifies the waste of losses, and believe, too, that most winning designs would have been better if worked out in consultation rather than in competition.

Though, occasionally, we find that want of intel-

ligence and fairness characterises the action of promoters, the preparation of bad conditions is generally due to want of knowledge, and in the majority of cases, when attention has been drawn by the Competitions Committee to defective or unreasonable conditions of competition, the promoters have accepted help from the Committee as courteously and readily as it was offered; and as one set of conditions is often taken from another (where an assessor has not been appointed, as he should be, before the conditions are drawn up), progress has, I believe, been made in this respect in the district in which we represent the Royal Institute. If conditions are unfair or unreasonable, I believe that members will gladly abide by the decision of the Committee. Our Committee has been in communication with that of the Liverpool Society with a view to drawing up a model set of conditions which may be of advantage to promoters and competitors alike, for it seems obvious that mutual confidence between promoters and competitors is the first essential to the success of a competition.

But a fairly regulated competition of brains, bad though I think that is, is as light to darkness compared with competition in terms of which we occasionally hear. Such competitions this Society steadily sets its face against, and you will probably agree with me that the following extract from the *Manchester Guardian*, which I take the liberty of quoting in full, puts the point forcibly and clearly. Substitute "architect" for "teacher," and "architecture" for "education," and nothing further need be said, except to point out that if an Education Authority, or anyone else, institute scales of their own which are considered unfair and unprofessional, they are limiting ability in their competitions and damaging their cause as much as if they were offering improper remuneration to their teachers.

"*An Advertisement for Teachers.*

"In this week's *Athenæum* the Cambridgeshire Education Committee advertises two vacant masterships in a secondary school under its control. The advertisement, otherwise quite normal, has one feature which we trust, for the credit of English secondary education, is unique. No salary is announced, but applicants are asked to state the salary required. The inevitable inference from this is that the Education Committee has not fixed upon a salary which it thinks adequate for the work, but is practically inviting applicants to compete against one another in a kind of Dutch auction. To such a course there are very weighty educational objections. When the salary is not fixed, the standard of efficiency is not fixed; for the first effect of fixing a salary in educational as in other work is to indicate roughly the manner of man who is wanted and for whom it is worth while to apply. Setting applicants competing against one another, not on the basis of their technical qualification, but on the basis of their willingness to take the job on at the lowest rate, suggests that the Cambridgeshire Education Committee has a much greater respect for what it no doubt calls 'economy' than for the efficient conduct of its schools. Can it expect men with the equipment of knowledge and skill and zeal, so necessary for good teaching work, to enter into a competition which is an insult to any good craftsman's pride? Of course the Cambridgeshire Education Committee did not mean to insult anybody, but, nevertheless, it has treated the teaching profession as no builder would dare to treat a bricklayer. This kind of heedlessness points to a lack of reverence for education, which is the secret of the lamentable condition of the English school system."

The question of competitions is one of the many in which a Society like ours can bring influence to bear.

Personal intercourse is a strong bond, and it has always been a tradition of this Society that in cases of difficulty or doubt the advice of one member was at the disposal of another. One is indebted oneself for many a conversation which has cleared up a difficulty, and the more experienced members of the Society are, I am sure, always ready to place their help at the disposal of the less experienced, and the more intimate intercourse between members since the bequest of Mr. Mills enabled us to have rooms of our own has made this mutual help all the easier. I was reminded the other day of the kindly assistance that Mr. John Holden was always ready to give. He was ready with sound advice for anyone who sought it, and I doubt if anyone was ever more honoured in this way than our late President. For Bacon says that "the greatest trust between man and man is the trust of giving counsel."

The library again will, I hope, become increasingly useful, and we owe a debt of gratitude to Mr. Sellers for having designed us a delightful range of book-shelves in which the books are now rearranged and easy of access. The Society ought to spend more on books, and I wish we could see the library endowed with a regular income for the purchase of books as chances arise.

Thus mutual help to promote the welfare of our Society, and the honour and efficiency of the profession, is one of the ideals that I should like to remind you of.

Can we architects say that, on the whole, we have, for the last century, had any common ideals, I will not say as to design, but as to the principles of architecture? If not, where does the blame lie, and are we in a better or worse respect in this matter than other countries? We might concede that France and America are ahead of us—certainly in monumental works of civic architecture. With other countries I do not think that we need fear comparison on the whole, while in domestic and ecclesiastical buildings perhaps we lead.

It is instructive to hear what people have to say about themselves, and I translate from a French critic writing in the *Nineteenth Century*. He says:—

"Our modern architecture is hideous and absurd. To see the sad proof of this one has only to wander through the streets of Paris and summon courage to examine the more recent buildings. *Quelle horreur!*

"Old houses remain. Modest though they be, and impaired by time and restorations, they retain

a kindly look, an air of good taste, and reasoned and charming simplicity. Fewer and fewer are left. Our architects are in a hurry to destroy them all. I quite understand why—they hate these witnesses of the cultured past.

"Only look at the façades that are built to-day. They are horrible, and the essence of unreason. Ornament devoid of delicacy and real elegance is plastered on a frame which is no frame, mere mass, eccentric without humour."

The French hyperbole does not translate well, and in English may produce an exaggerated impression, and I do not think that the accusation is a true one. There is much fine contemporary work in Paris, and, even where parts of buildings are more like a rat-eaten cheese than masonry, there is often in them a certain distinction and the evidences of past tradition. In France they have never lost their tradition with its educative influences, and there is that hard, firm, architectural feeling for the designing of masonry that we see in work of the Italian Renaissance. In England our irreparable loss has been the breaking with our great tradition. Since we let it slip from our grasp English architects have been at the mercy of enthusiasms and fashions; one experiment in style has succeeded another, and the uncompromising and reasoned principles of all great architecture have been neglected for more picturesque and amiable qualities, and, while in the process we have created a large number of examples with essential character, we have lost power over the more important and monumental work, a power, however, which I believe we are now regaining.

The Venerable Bede tells us of the conversion of King Edwin to Christianity; how he held a council at which Coifi, the chief priest, addressed the king: "The religion which we have hitherto professed has, as far as I can learn, no virtue in it. For"—and note the reasoning—"none of your people has applied himself more diligently to the worship of the gods than I, and yet there are many who receive greater favours from you and are more preferred than I." On these grounds he recommended a change of religion just to see if he couldn't do better for himself under a new than under the old régime, and I don't know that architects have had any better reasons for many of their experiments in style.

Is the time yet past when a sketching expedition will determine these experiments for a time, just as a second tour will give another bias, or when we shuffle from one Shibboleth to another, and cover our Gothic wolf-hide with a Renaissance sheepskin that we may the more easily catch an unwary assessor? And if this is true, is it not due to want of that balance which a true architectural education gives, and to the competitive system, with its resulting struggle to do something individual, something that is supposed to be different from, or better than, anything done before?

The only justification for departure from the canons of known great and good architecture is the condition of success, of succeeding in doing something better and greater. This presupposes genius of the highest order, but for the ordinary man education is the only safeguard. And may we not congratulate ourselves that we have already realised, just as it is being slowly realised in national life, that education is the one foundation upon which to build?

The education of an architect is a long one, and the ordinary pupilage in an office must be supplemented by a great deal of personal work entirely outside its routine. That work may be left to personal enthusiasm and luck, or it may be properly directed in an architectural school, or supplemented by partial education at technical schools, or lectures, or art classes. But some means of education are now usually within the reach of most students, at any rate of those living in centres of population, where a very large proportion of the architectural work of the country is carried on, and where men can meet together, and enthusiasms will find vent, and mind react upon mind.

But, whether education is self or school acquired, its real quality must be the same in any case, and it is on this real quality that I would insist, rather than on the false ideal which measures education by the amount of technical information amassed. The training of the mind to use that information is the real test of education, and to quote Lord Morley again—for I do not think that we can hear it too often—"the power acquired of sifting evidence, and of judging how far circumstances limit the application of abstract principles, and how far circumstances transform principles, excellent in certain respects and certain places, into irrelevant catchwords." Those words seem to me particularly applicable to us as a profession.

A writer in the *Quarterly Review* says, speaking of another subject than architecture: "First, as children or barbarians, we are formalists and traditionalists; later comes personal experience; finally reflection on experience and tradition, and their rational combination and justification." Is not this equally true of our own art? And does not the "rational combination and justification of tradition and personal experience" express very accurately the end of all education and practice in architecture?

This mental, intellectual, and understanding element is of much more importance than excellence of technique. A great mind or a mind greatly trained may not be associated with great craftsmanship. One often feels that this is true, for instance, in Romanesque work or early Gothic, or Renaissance. The actual acme of a style is almost invariably the work of mind rather than hand, "a tendency towards the impression of an order, a sanity, a proportion in all work, which shall reflect the inward order of human reason."

Walter Pater says in speaking of the Eginetan Marbles :— "For as art which has passed its prime has sometimes the charm of an absolute refinement in taste and workmanship, so immature art also has its own attractiveness in the naïveté, the freshness of spirit, which finds power and interest in simple motives of feeling, and in the freshness of hand, which has a sense of enjoyment in mechanical processes still performed unmechanically in the spending of care and intelligence on every touch." There is something, too, of the same feeling when Browning makes Andrea del Sarto exclaim :

> That arm is wrongly put—and there again—
> A fault to pardon in the drawing's lines,
> Its body, so to speak : its soul is right,
> He means right—that, a child may understand.
> Still, what an arm ! and I could alter it :
> But all the play, the insight and the stretch—
> Out of me, out of me !

So technical excellence is not all. Knowledge is not all. The important thing is the mind that directs them, and those who have no genius must patiently seek the power to direct, and noble methods of thought are only the quality of those who have made for themselves a very wide and true education ; for we are not talking cant when we say to ourselves that the practice of architecture in its highest form—and it is no use talking of anything else—exacts the richest combination of power and knowledge. And if so, we come back to the proposition that education is not technical cramming, but that liberal training which gives the widest understanding and the largest grasp.

Great strides have been made of late years in opportunities for architectural training, but the student must still seek the wider education of which I speak for himself, and it rests with him. Universities are one after another opening architectural schools, and I cannot but help hoping that at some time in the future a university training will be not only available for but obligatory on every architect. In the meantime we accept gratefully what we can get, and it is the part of this Society to advance the cause of education in every possible way. It is an ideal that we should set before ourselves : the more we get, the more we shall want, and we can help one another by reading and talking, and stimulating enthusiasm. It is no use telling me that I am talking on a plane that is inapplicable to the work that most of us have to do. I do not believe you even if you cite purely commercial work. We have abundant evidence that work of any class that you like to name may be done well or badly, in an educated or uneducated, an architectural or an unarchitectural manner. I do not say that your type can be that of the Strozzi or the Farnese. It will be a type suited to modern requirements and domestic conditions, but it need not be bad, ignorant, or unarchitectural.

We may none of us ever build a cathedral or a city hall, but there is no reason why we should deliberately train our minds to build cottages. Studies from old buildings are not or should not be made that they may be produced from a drawer and transferred to paper as occasion demands, but that the results of study, always stored in the back of the mind, may insensibly influence the designer and impress a character on his work, based on the principles that he has gained by observation.

While principles are the common heritage of all great art in all times and all countries, particular methods of thought and expression have always obtained locally, and must necessarily do so until religion, character, and education are merged in one great common civilisation, and we have a larger share of sun, and Italy of rain. It was disregard of this that did so much injury to English architecture in the latter half of the last century. The world is becoming more and more cosmopolitan, and its treasures lie open to us through travel or books; but, after all, a nation must have lost its true instinct for art if it allows itself to be carried away, as it was by even so wise a teacher as Ruskin, into sketchbook architecture, and have lost its virility if it surrenders its conscience to the keeping of an alien culture, unless, on the top, it can build up a really national art.

The building-up of styles essentially local, though based upon generally prevailing ideas, forms indeed a great part of the history of architecture, and is nowhere more fully illustrated than in our own corner of the world ; and to realise that modern world politics and world culture have not changed the conditions, we have only to go to America for an instance of what we spoke of before as the "rational combination and justification of tradition and personal experience." America went to Paris for her training, and on the basis of tradition and broad scholarly education she has already erected the superstructure of a fine national architecture.

One of the most notable additions to our libraries within the last two years is a book addressed to students, the influence of which has already been great. That we find in its author a strong advocate for broad and scholarly work is only another way of saying that his book is a plea for broader and more scholarly minds, for a broadening of the basis of education, for the recognition of fixed principles, for the creation of more spacious times and of larger ideals. I have sometimes thought that I heard signs of "grand manner" degenerating into an "irrelevant catchword." *The Mistress Art* is a series of lectures to students, advice to them as to methods of study, and an appeal to an ideal of reason, scholarship, and imagination, and to the highest instincts of the architect. But we must also remember that breadth and scholarship of treatment is not necessarily confined to work of a particular character ; for a man with £30,000 or £40,000 to spend on a house, to treat it as a glorified cottage is disproportionate and absurd, but the tenth part of that amount, conversely, will not admit

of much grand manner. Distinction and breadth and beauty of simple detail, however, it will admit of, and the majority of us must not lose touch with the necessities of everyday life.

Now with regard to the practical opportunities of education, especially with regard to our own case.

The importance of the subject has been recognised by the Universities of Cambridge, London, Manchester, Liverpool, and Birmingham, all of which have architectural schools. In addition, Liverpool now has made an important departure in its School of Town Planning and Civic Design, and the Architectural Association have an excellent curriculum. The Institute has not been idle, and has taken a lead in organisation and co-ordination; but from the nature of its composition, and the fact that it is an examining and not a teaching body, it does not come into close touch with its students. In smaller Societies like our own, the position is less august but more human, and we do come into closer relationship, so that we should be able to advise and help our students, though, owing to excellent opportunities afforded by the University and the Municipality, we have not the same incentive to do actual teaching as have some other provincial Societies whose keenness in the matter of education is great. But anything that we as a Society can do to forward the work of the Manchester School of Architecture should be—and I think that I may say shall be—done. There must be many pupils in offices in our district who ought, if possible, to be taking degrees at the University, and it is to be hoped that both parents and masters will recognise this, and that members of this Society and pupils will make enquiries and consider the practicability of the combination of a University course with pupilage in an office, which is of necessity indispensable.

The University does not stand still. This year new buildings have made more class and tutorial work possible, and it is the combination of the tutor with the lecturer that seems to me to be the basis of sound teaching in bringing to bear that element of personal interest and relationship in which the lecture room is inevitably wanting. The new syllabus of the school shows how well it is now organised, not only for a University training, but for the help of those for whom a degree course is out of the question. One thing remains to be done, if not by the University itself, then by some sympathiser from outside: I mean the endowment of an annual scholarship or scholarships which shall ensure to one or, if possible, more students a sufficiently long time in Italy or elsewhere to study at first hand the buildings which they know as examples in the schools. Such an endowment would not only be in itself a great advantage, but would naturally add attraction to the school.

Well, then, in this matter we have another ideal to keep before us—the ideal of broad and thorough education—and it almost seems a corollary that nobody without a sufficient education should be allowed to exercise his talents on bricks and mortar. I can see no substantial benefit to the architectural profession in registration *per se*. I can see a great benefit, not only to the profession, but also to the country in a really adequate pledge of competency from the man who is to follow a complex and difficult calling.

You will remember the reply of the Pope to those who sought to punish Benvenuto Cellini for an outrageous murder in the streets of Rome: "I must inform you that men like Benvenuto . . . are not bound by the laws." So it is argued to-day; you cannot ask a genius to sit down to an examination, much less to sit down to a *viva*; he is not bound by the ordinary rules. I doubt if any man with the brains to do great work and to carry on an architectural practice could fail to pass an examination; I doubt if any of the great masters of the past could not have done it with the greatest ease. Genius might say, "I won't be bothered." It might say "I defy you to test art by examination." The first answer should be inadmissible, and in the second we will entirely agree; I think that we shall say that we will not attempt it, and that all that we can do is to see that the average man whom the Institute would admit to practise has been trained as an architect, and not, possibly, as a jerrybuilder, and thank the gods if they send us an artist.

Moreover, it is quite conceivable that examinations should not necessarily be the entire test, or under some circumstances the test at all. Work done in the quiet of the schools might well count for something, and many modifications of the present examination system might be made so as to ensure a truer test of education than that of cramming and ill-digested information.

It is no part of my purpose to suggest ideals in design or to enter upon a criticism of modern street architecture, but I think that we must confess that in no country in the world are the streets of great towns so dull and wanting in dignity of planning and design as they are in this country. The subject of civic design has only just begun to be considered here—very late in the day—and it is likely to be as important from the architect's point of view as it is vital from that of the community. In the study of this subject a Society like ours should take a leading and educating part, and we, like the Royal Institute, have our Town Planning Committee, which has already done a considerable amount of work, and is preparing to do more in spite of the present uncertainty with regard to the Town Planning Bill.

We may take it that, if our great industrial communities are to live the lives which human nature demands, existing arrangements will need to be bettered and very serious and weighty consideration given to future developments. Apart from absolute necessity, from the standpoint of national

health in large centres of population, why should building estates and extensions to towns be characterised by want of thought and haphazard dulness, which is bound to degenerate still further into the slumdom of the future?

If there is one district in the world in which this subject needs taking up, it is in that surrounding the city of which we are most of us citizens, and citizens who should be possessed of special knowledge. Manchester is the metropolis of a district with an enormous population. Realise to yourselves its relationship towards the towns that ring it round, and you cannot fail to realise also the magnitude of the problem that presents itself. Manchester itself is ugly; its smaller neighbours have more concentrated ugliness and squalor. Year by year the intervening spaces are closing up without any regard to the ultimate end. The development is taking place under by-laws which, so far as they go, ensure a certain sanitary standard in the individual house, but there is no power to enforce any regard to the health and convenience of the population as a whole, or permit possibilities of—I will not say artistic, but reasonably attractive surroundings. And it seems almost inevitable that unless the various authorities take some sort of action within their own boundaries, and in co-operation with their neighbours, the whole of South Lancashire and parts of North Cheshire must in time become one enormous town without proper lungs, with enfeebled brain and pulse, overgrown, unwieldy, of unspeakable dulness. You can see it going on under your own eyes.

How is this difficulty to be met, and how can architects help? I see no way except meeting it fairly and squarely, while fully realising the magnitude of the task, just as it has been met in other countries; and although we are well acquainted with the methods adopted in Continental or American towns, you may be interested to hear shortly some of the impressions made on me during a visit to some towns in France and Germany.

Now the architect is naturally more interested in the fine and monumental lay-out of a town, in that, for instance, of which the Place de la Concorde is the centre, or of the Place Stanislaus at Nancy, than in smaller questions of housing. Such things are monumental and appeal as a question of study to the bigger ambitions of his life. But just as an education in architecture should be on broad lines, so should that of the town planner be; and though he studies these monuments with enthusiasm, he will be eager to adapt himself to the lines of his more probable occupation, and, while levels and gradients are mostly questions of engineering, the architect trained to see opportunities and to exercise his imagination will be an invaluable if not indispensable ally in securing that amenity which every town may demand. The town plans in Germany are almost always prepared by or submitted to architects who are authorities on the subject, and if not by an architect alone, by architect and engineer in consultation. It has been realised that modern opportunities are not often those which were offered to Haussmann or Heré, but nevertheless the results achieved are extremely good. Difficult problems, such as that of Stuttgart, are admirably met, and lessons have been learnt from failure. The planning in some towns was done on too generous a scale, where the width of the street and size of the open spaces raised the price of land to such a height that great barrack buildings were the result, as, for instance, in Berlin.

The architect must make up his mind therefore to study the practical problems of traffic, of population to area, of access of sun and air, and all the other considerations that affect a town plan; and though he must, if he wishes to deal with large schemes, as opportunity arises, have trained his imagination to the picturing of great spaces and vistas, and their setting with buildings, trees and statues, his ability should also be at the disposal of municipalities or housing reformers in their more practical schemes for development. And I believe that his help may be very real, and that Societies like ours, through their Council or Town Planning Committee, may very properly claim to be heard in consultation when any question of town planning is raised, and do much in the formation of public opinion on the subject.

The visit of which I spoke just now was altogether of great interest, and owing to the auspices under which I travelled I was able to see the working of their system in Germany in a way which would be difficult for the individual traveller, and to enjoy the extreme courtesy and hospitality of the municipalities that we visited. I do not propose to give you any account of it all, but rather to describe to you briefly the method of development in one town, and, as a preliminary, to remark that it was method rather than performance with which I, personally, was impressed.

A town plan is the rule in Germany. A plan of town extension, and often a large model, is prepared showing the roads, open spaces, and general arrangements sufficient to carry over, say, thirty years. Most towns hold land, some do not, but in either case a definite land policy is adopted and carried through over a period of years. This is possible owing to the continuity of municipal government, at the head of which is the *Oberbuergermeister*, a permanent official, combining approximately the offices of our mayor and town clerk. I understand that in some towns he is appointed for a probationary term of three years, and that if this is successful his appointment is confirmed for life. But in some cases this is not so, and the term is shorter. In any case a policy once adopted is final, and its success in many cases is remarkable.

The building policy is to my mind not always

so admirable, and I think that we need not fear comparison either as to design or cost. Accurate figures are difficult to get at, and one never can be sure that a comparison is quite fair; but when we worked out the cost of artisans' houses built by one municipality it seemed to be about 8*d.* per cubic foot. I do not think either that there is anything very wonderful about this town planning, beyond its extreme thoroughness. Much of it is, of course, experimental, but it seemed to me that with a competent architect and engineer equally good results might be obtained here. At Stuttgart, the town plan of which some here may know, the difficulties of the plan were really its opportunities; and while the hilly sites have been dealt with in a very competent and common-sense way, there seemed—so far as I could judge from the plan itself and from a drive over a large part of it in execution—to be no superfluity of genius or imagination.

But perhaps the most interesting insight that one got into the inner working of town planning was at the picturesque town of Ulm, on the Danube, a town famous throughout Germany for the progressiveness of its town planning and land policy under its Oberbuergermeister Otto von Wagner. We studied the town plan, and drove all over the ground and saw the buildings, and learned how the policy of the municipality was to own land, build houses, and sell them with the right of repurchase and conditions preventing sale for speculation purposes. In five years they have made a profit of £250,000 in buying and leasing. They bought from the Government the fortifications which hemmed them in, and have sold a considerable part for double the price paid, and have filled in the moat, where they are making roads and gardens, and retained the belt of wood that, for defensive purposes, enclosed them. Outside these lines the town plan has been formed. Inside they treat their town with keen conservatism, and any necessary alteration is most carefully studied.

By the invitation of the City Architect we went to his office at the Rathhaus. Here were hung prints and drawings showing old buildings in the town at various dates: illustrations, for instance, of the Rathhaus, from which it had been restored; there were pictures of buildings that had been necessarily removed, oils or water colours of considerable merit, but most interesting of all were a series of studies for a new bridge across the Danube and the lay-out and buildings that were to form the entrance to New Ulm, the suburb on the opposite bank of the river. There were many trial plans, elevations and sections, and a large number of delightful perspective studies of the bridge and buildings, carefully drawn first in pencil on brown paper and then effectively completed in charcoal with white lights showing the entrance to the suburb, with buildings nearer or further apart, higher or lower with varying skylines, or with arcades along the river front. Then, again, there were buildings with the lower story treated as an open arcade, and in one the streets bifurcated from the "place" beyond the bridge; in another the line of the bridge was carried on with a straight street, and so on. I cannot remember all the variations and details, but what impressed itself on my mind was the immense care and thought that was taken before any move was made, and that this should all be done in an office at the Town Hall. Under such conditions town planning should be a success.

A story heard at Ulm sounded almost incredible to one hailing from this part of the globe, but the evidence was circumstantial enough, and I saw the house in question, whose owner in his architectural efforts had outraged the taste of his fellow townsmen and their pride in their city. It was explained to him that it would not do, and that, in particular, a new roof and certain other small matters would be the least that could be expected of a respectable citizen. The municipality offered him £150 towards his expenses, and the pressure of public opinion was such that, with this small help, he remodelled his house, and now, if not a great work, it takes its place more or less modestly among its picturesque surroundings on the wall overlooking the Danube.

Tree-planted streets are regarded as essential on the Continent, and even if, unfortunately, we have not the same necessity for their shade in this country, that is no reason why we should not avail ourselves of the colour and refreshment that they offer. Main tree-planted avenues should be essential. Might we not make a small beginning? There are trees which would grow better in Whitworth Park than many that are planted there, and with better effect. If in Whitworth Park, why not at All Saints and in other parts of Oxford Road? And if there why not in Albert Square, or round St. Anne's, or the Cathedral? I can imagine a fine effect of pollard plane trees round a monumental building on the Infirmary site.

Our Corporation have been most careful in retaining and protecting trees where roads have been widened, and where the roadmaker would have found it better to his taste to clear them away. For this we are grateful. Will not they plant and try what may be done?

In dealing with these great and pressing problems of town planning the Germans have, more than any other nation, undoubtedly set themselves a very high ideal of civic duty and responsibility, and if there is something lacking on the æsthetic side, competency and thoroughness exhibit themselves everywhere. Economic and social problems are not comparable there and here, and in reality our task is a much heavier one than theirs; but we, on our part, may do something by realising the responsibility of our generation and by applying our brains to a problem that, somehow or another, must be solved.

The M.S.A. Kalendar.

The Manchester Society's *Kalendar* for 1909–10, just issued, reflects the Society's numerous and steadily increasing activities. Annexed to the Council's Annual Report are the Reports of the various Committees—Education in Architecture, Library, Competitions, Practice, House, Students', Town Planning Bill, and Summer Visits. The aggregate membership at the last count was 265, an increase of eight on the year. Generally the review of the year's work is very satisfactory. The Students' Committee, however, express disappointment that so few students avail themselves of the advantages the Society offers, and regrets are also expressed that there should be so little competition for the Society's prizes. The Town Planning Committee, of which Mr. Paul Ogden [*F.*] is Chairman, has collected information on its subject from various sources at home and abroad, and has been engaged upon a suggestive plan for dealing with the development of a portion of the Manchester suburban areas. The Council has given serious consideration to the action of members of the Society who submit designs in architectural competitions when the conditions of such competitions have been disapproved by the Council; and on the instructions of the General Body the following By-law has been passed: viz. "A member shall be considered to have failed in the observance of a lawful regulation of the Society, or of a lawful regulation, by-law, or order of the Council, within the meaning of Article 61 of the Articles of Association, and shall be liable to the penalties therein stated, if he shall submit, either directly or indirectly, a design in any architectural competition the conditions of which are unsatisfactory to the Council and of which notice has been given to the members by the Secretary." The Council's protest against designs for new schools being prepared by officials in the drawing office of the Manchester Education Committee has already been noted here, and their letter of remonstrance will be found in the last volume of the JOURNAL, p. 446. The Society's arrangements for the new Session include the following:—Oct. 27, Paper by Mr. Roger Oldham, "Thoughts on a Holiday"; Nov. 10, "Practical and Theoretical Training," by Mr. R. W. Schultz; Nov. 24, "Ancient Lights," by Mr. P. M. Oliver, B.A.; Dec. 8, "Workmanship," by Mr. Henry Wilson; Jan. 12, "Concrete and Concrete Tests," by Mr. A. E. Corbett [*A.*]; Jan. 26, "Truro," by Professor S. H. Capper, M.A. [*A.*]; Feb. 9, "Town Planning," by Professor S. D. Adshead [*F.*]; Feb. 23, "Draughtsmanship," by Mr. Paul Waterhouse, M.A. [*F.*]; March 9, Discussion of Students' Drawings; March 16, "English Castle-Building," by Mr. J. T. Halliday [*A.*].

Northern Architectural Association.

The following are the arrangements for the Ordinary Meetings of the Association this Session:—Nov. 10, Opening Address by Mr. G. T. Brown [*F.*], *President*; Dec. 8, Paper by Mr. John W. Simpson [*F.*]; Jan. 12, Paper by Mr. Frank W. Rich [*F.*]; Feb. 1, Paper by Mr. George Hubbard, F.S.A. [*F.*]; March 2, Paper by Mr. Joseph Oswald [*F.*]; March 16, Annual Meeting.—Students' Meetings: Nov. 17, Paper by Mr. J. G. Smith on "Portland Cement Manufacture and Testing"; Dec. 15, Paper by Mr. E. Stevens on "Renaissance Architecture"; Jan. 19, Paper by Mr. S. Ash on "A Holiday in Belgium"; Feb. 16, Notes by Mr. W. Milburn, jun., on "Continental Hospitals."

The Royal Architectural Institute of Canada.

Mr. Alcide Chaussé, Hon. Secretary of the Royal Architectural Institute of Canada, sends an account of the proceedings at the Second General Annual Assembly of that body held at Toronto on the 5th and 6th of last month. The convention was representative of the strongest interests of the profession throughout the country, and the important aims of the Association and the good work it is doing in regard to the elevation of the architect's status received a very gratifying and encouraging impetus. The session was given over almost entirely to the discussion of the high purposes which were had in view in the formation of the Institute. The proposed federation of the various architectural bodies was considered, and the following resolutions passed:—1. The conference recognises the necessity of the Royal Architectural Institute of Canada as a representative Canadian body; 2. The Royal Institute is of opinion that the architects of each province should be organised in a Provincial Association, and that in the provinces where there is no Provincial Association the members of the Royal Institute in such provinces be urged to take steps towards the formation of such an Association; 3. That candidates for election to the Royal Institute, if living in a province where there is a Provincial Association of Architects, should, before being admitted to the Royal Institute, become members of the Provincial Association.

In a discussion upon the possibility of a national status for architects, Mr. H. B. Gordon, of Toronto, pointed out that while waiting for such status to be recognised and established by law there was a field of activity along voluntary lines—(1) seeking to secure from all the architects of Canada an adherence to a uniform code of professional ethics; (2) seeking to secure a uniform and high standard of architectural education in all the provinces of Canada; (3) seeking to secure a uniform tariff of fees, and a uniform understanding of the relationships that should exist between the architect and his client. When they had progressed along these lines, and had lifted and unified the profession throughout Canada, the public and the Government would be so educated on the question that there would be no difficulty in securing all the necessary legislation desired. Mr. J. P. Hynes, of Toronto, urged that the facilities for architectural education in the provincial university should be second to none; the profession would never obtain a status before the public until they had an established status as an adequately trained and properly educated body.

At the banquet on the following day the toast of the Royal Institute of British Architects, proposed by the Chairman, was responded to by Mr. F. S. Baker [*F.*], and the need for more adequate facilities for architectural education was driven home by a later speaker, Mr. John Lyle. He claimed that the profession had not received proper consideration at the hands of either the Government or the University authorities; and further urged the necessity for training the public to a higher opinion and a more serious consideration of the architectural profession. The qualifications required in an architect were as high as in any of the other trained professions. A Chair of Architecture was badly needed in the University of Toronto, and public opinion should be fostered in favour of its establishment.

Mr. A. F. Dunlop, of Montreal, has been re-elected President of the Royal Canadian Institute.



Grosvenor Square. From an Old Engraving.

THE PLANNING AND LAYING-OUT OF PUBLIC PLACES.

By H. Inigo Triggs [*A.*], *Godwin Bursar* 1906.

Read before the Royal Institute of British Architects, Monday, 15th November 1909.

SOME five years ago two papers of considerable interest on the planning of cities and public spaces were read in this room by Mr. John W. Simpson and Professor Beresford Pite.* The papers, as the writers said, were intended to touch only upon the fringe of the subject and to induce further investigation.

Mr. Simpson outlined in his paper some of the lessons to be learnt from a study of classic and mediæval places; the value of grouping buildings around well-defined centres, and also that of grouping these centres themselves; the importance of arranging streets to enter at the angles instead of in the centre of a place; the suitable enclosure of the place on all sides, &c. These and many other lessons are equally applicable to any form of place in the present day. But while we do well to take to heart these lessons from the past, we must beware that we are not led to imitate too blindly the planning of places adapted to requirements having little in common with modern traffic demands. The advent of the newspaper may be said to have abolished the principal reason for which the mediæval public place existed—namely, to hear and discuss the news of the day, and listen to the reading of public proclamations. In like manner since the gorgeous ecclesiastical ceremonies of the Mediæval and Renaissance Church are things of the past, the great church places have no longer the same *raison d'être*.

Time will not permit of my attempting to sketch the historical evolution of public places in the past, and moreover this part of the subject has been dealt with in Mr. Simpson's interesting paper to which I have already referred. Neither am I able to deal this evening with the planning of public parks and larger areas, but I propose to confine myself to what is perhaps the more strictly architectural side of the subject and to consider the planning of public places from a modern point of view.

A demand has arisen for new types of public places for traffic—places that shall effectively receive and distribute streams of vehicles with safety to pedestrians; for monumental and

* Journal R.I.B.A., 8th April 1905.

garden places that shall show to the best advantage the buildings that surround them, and for places that shall be useful at the same time for military parades, exhibitions or sporting purposes, sanded or turfed and surrounded by trees, such as the Champ de Mars.

Aviation is making rapid strides, and, as M. Hénard has recently pointed out, the necessity for trial grounds and alighting places will soon make itself felt. I hope that I may not be considered too visionary in suggesting that the day may be not far distant when Hyde Park itself will furnish the site for a new form of place, the aviation place, with gigantic sheds able to accommodate a fleet of dirigibles.

But to return from these flights of fancy to solid ground, let us consider some of the more important lessons that may be learnt from a study of town planning in the past. I think that one of the first is the value of grouping buildings round definite and fitting centres. Sir Christopher Wren strongly emphasised the importance of this in making his plan for the rebuilding of London. He placed a spacious *rond-point* at Ludgate Circus from which eight streets were to radiate, a triangular space opening up the fine vista of St. Paul's Cathedral, a monumental place at the Royal Exchange, together with five other controlling places at important traffic junctions.

In classic cities the Agora and the Forum invariably formed fitting centres for the grouping of the principal public buildings, and in mediæval towns we always find the public places dominated by some great church or public building. The "Grande Place" at Brussels, with its Hôtel de Ville, the Market Place at Ypres, dominated by the glorious Cloth Hall, and the "Place Verte" beneath the spire of Antwerp Cathedral are all instances in point.

In replanning Paris Baron Haussmann and his successors fully realised that more depended upon the placing of structures than upon the structures themselves, for a noble building amongst mean and ugly surroundings is worthless in any scheme of town planning. Public buildings, standing as they do for the whole community, should represent its loftiest aims, its noblest sentiments, and its highest ideals. Paris has perhaps the most glorious civic centre in the world in the combination of the Louvre and the Tuileries gardens.

In the United States, starting with the examples of Washington and Cleveland, the town planners within the last decade seem to have realised how grand the effect of buildings arranged in a stately manner may be, and that the advantages to be gained by grouping public edifices are not only æsthetic but also tend to convenience and to simplicity of administration and maintenance. Numerous cities are now engaged in formulating plans for civic centres on the lines of Washington and Cleveland, where they seem at last to realise how much of the effect of important buildings is lost when they are scattered indiscriminately about the town, as is the case with the finest public buildings of London, almost without exception.

The principal civic centre should naturally be occupied by Government or municipal buildings. But as a city grows the necessity will naturally arise for the creation of many subsidiary centres or focal points connected by thoroughfares and scattered about as dictated by the topography. In this country opportunities for the creation of large civic centres are not likely to occur often, yet each year the growth of our suburbs creates the need for secondary subsidiary centres which require quite as skilful handling as the larger ones. Even the smallest public buildings may be so grouped as to harmonise and help one another both by colour and scale. As an illustration of what I mean I would draw your attention to a scheme put forward by Herr Karl Henrici [fig. 1] for providing a series of such focal points in the suburbs of Munich. It seems to me that in dealing with the future expansion of London it would be hard to find a more suitable model or one demanding less drastic alterations to existing streets than such a scheme as this.

In London we have, I fear, too often lost sight of the importance of enclosure to a public place. Hyde Park Corner, for example, would be much finer to my mind if the five

broad roads that enter it could be arranged to converge towards a large semicircular architectural place.

This sense of enclosure need not necessarily be obtained by means of architecture: often a fine effect may be made at very small expense by the skilful planting of trees; but where planting is substituted for architecture it should be of as formal a character as possible. In order to further obtain the effect of enclosure, the streets opening into the place should be as far as possible so planned that a vista is avoided and that the eye travels over the open space and rests on one of the boundary walls. We realise the lack of this desired effect in Piccadilly and Oxford Circus, where the sense of enclosure is entirely lost, first by the streets being taken straight through the place, and secondly by the large proportion of circumferences given up to the street openings.

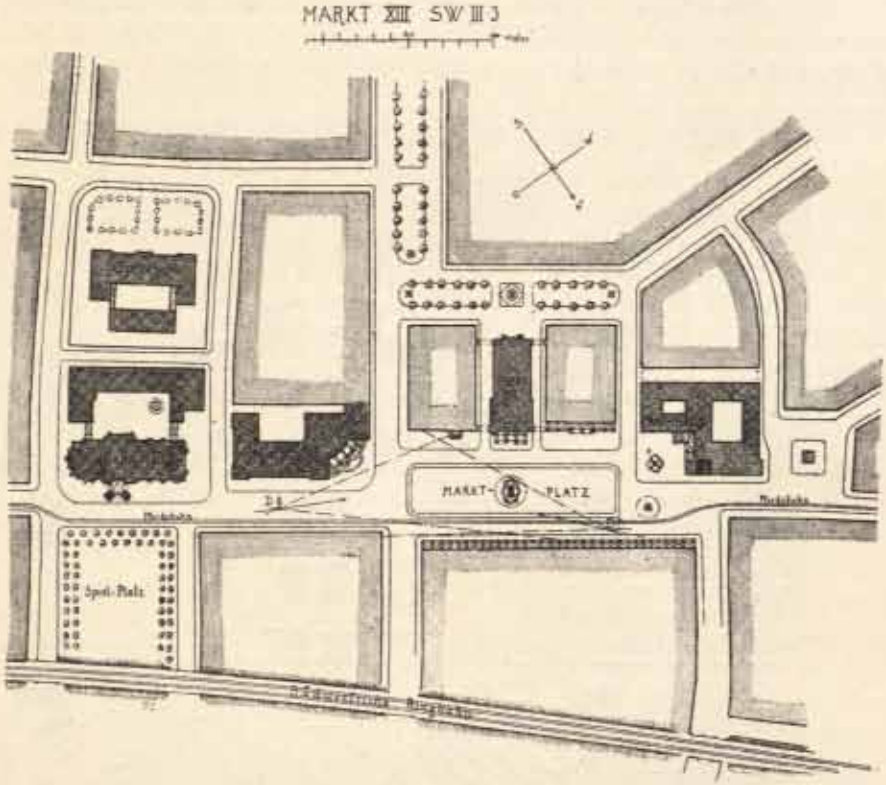


FIG. 1.—A TYPICAL CIVIC CENTRE IN HERR HENRICI'S PLAN FOR EXTENSION OF MUNICH.

Sitte and other writers have often insisted upon the importance of preserving and even creating an irregularity in public places, and although anything like a studied irregularity is hardly likely to be a success, much might be said against the folly of striving after a perfectly regular and symmetrical effect in places, even where they are surrounded by classic buildings. The Roman Forum should teach us this. The irregularities of ancient places (more noticeable on paper than in reality) proceed from their development, and generally from practical causes. The eye is always inclined to overlook the less apparent irregularities, and fails to estimate angles aright, though it readily appreciates the correctness of regular forms.

The public places of a modern city may be considered from three wide aspects—traffic, business, and ornament. In England the possibilities of treating traffic places as a means of properly intercepting and distributing traffic currents have not yet been fully realised, and it has generally been considered sufficient to place a few " islands " at those points where pedestrian traffic seemed to demand them.

The second class, viz. business places, includes those various types of place whose principal object is to facilitate the transaction of business, such as the market-place and the garage place in front of railway stations or similar points.

Ornamental places include all those laid out solely with the object of adding beauty to the

surroundings without any regard to traffic. We do not, of course, mean to imply that a traffic place may not be also a beautiful spot.

Architectural places include those which are designed to set off the surrounding architecture to its best advantage.

It frequently happens that the fulfilment of two or more different purposes is attained by one public place, as in the Place de la Concorde, Paris, which is both a traffic and an ornamental place, and also in some of the Parisian *ronds-points*, which, besides receiving and distributing

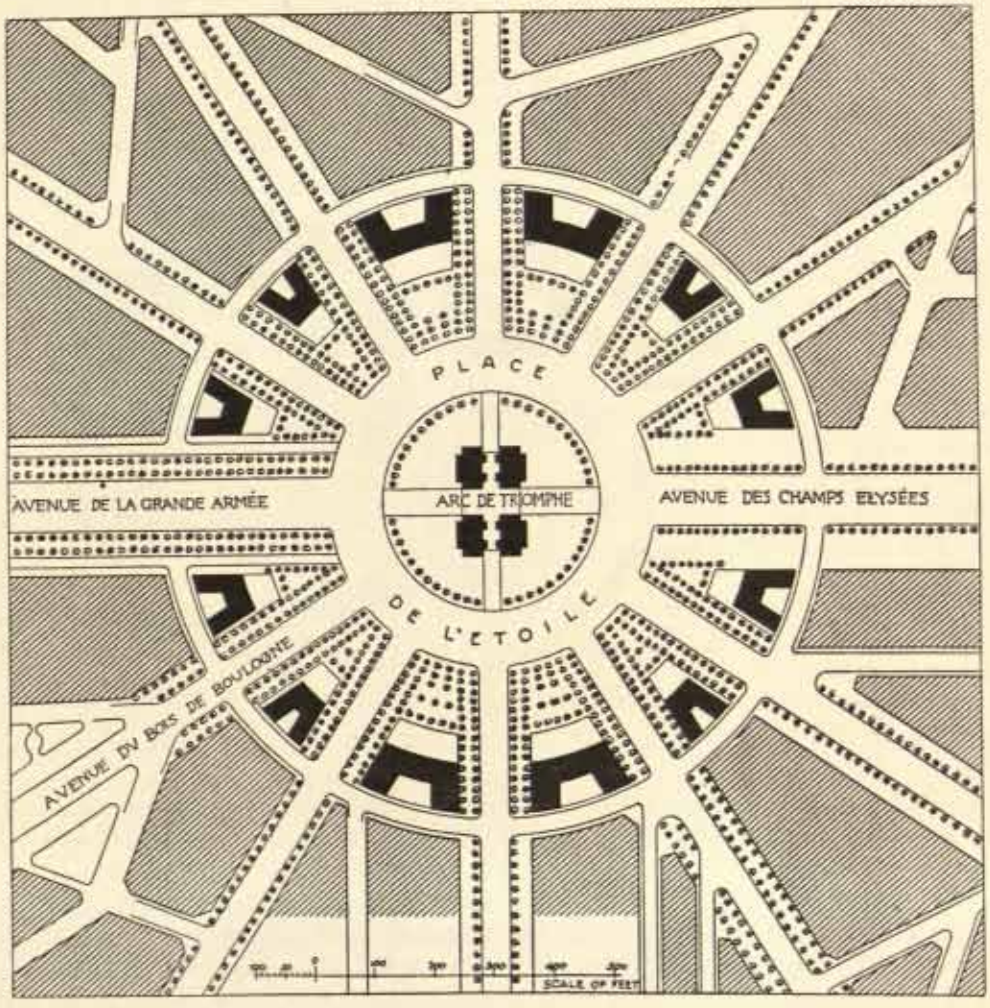


FIG. 2.—PLACE DE L'ETOILE, PARIS.

the traffic, are adorned with gardens, monuments, and fountains. The Place de l'Etoile is a combination of a traffic and an architectural place.

TRAFFIC PLACES.

The ideal form of town plan is the one in which the smallest number of traffic places occur, and it certainly does not add to the ease with which traffic circulates if it is continually being obstructed by a large number of streams converging to one point. But as we cannot do away with such places and must perforce regard them as a necessary evil, it only remains to guard

against the formation of useless traffic areas, and in planning such places to take the greatest care, first to estimate the volume and direction of the traffic, and then to regulate it by the disposition of the islands, whether they be the mere oval-shaped refuge or the more ambitious garden or monumental plot. For practical reasons it is desirable that the various lines of traffic should not intersect one another at one point, and where this is likely to be the case this point should be chosen for a pavement or grass plot. High monuments, or any objects likely to impede the drivers' view, are to be avoided in such a position.

A very favourite form of traffic place in modern continental cities is the *rond-point* or circus, upon which the thoroughfares converge like the spokes of a wheel. It has been much used where new quarters have to be united to old ones by thoroughfares, and its fullest development has been reached in such examples as the Place de l'Etoile and the Place de la Nation in Paris, planned at the western and eastern extremities of the city. Both were laid out as part of the scheme for dealing with the traffic of Paris, and also for the necessity under the Second Empire to facilitate the proper surveillance of the streets against riots. The Place de l'Etoile has a total width of 290 yards between the buildings, the central circular roadway having a width of thirty yards. In the midst of the place rises the magnificent Arc de Triomphe erected by Napoleon in 1806, from which radiate twelve important thoroughfares, varying in width from the Avenue des Champs Elysées, 90 feet wide, to the Avenue de Iéna, which is only 45 feet wide. In addition to the footpath there is a broad gravelled space planted with trees. The surrounding buildings are of one uniform style of architecture, which by a special ordinance of the city can never be changed. An interesting feature of the Place de l'Etoile is the outside ring of side streets, designed to relieve the traffic and to give additional access to the large blocks of buildings surrounding the place. Where the *rond-point* is of so large diameter as in this case, it is a convenient form for the traffic place; but where the diameter is smaller, and insufficient to allow for the secondary relieving street, the form can hardly be recommended. The circular enclosing line then becomes inconvenient for buildings, vehicles moving to one point interfere with each other, and pedestrian traffic must either cross the whole space between the moving vehicles or take a circuitous route on the footways round the place, unless there be a central island and subsidiary side ones. This brings us to the consideration of an ingenious arrangement known as gyratory regulation, first proposed by Mr. Holroyd Smith some few years ago. For reasons which I confess I am unable to understand the system does not meet with the approval of the powers that be. M. Hénard, who has strongly advocated the system in Paris, lays down the rule that the width of the circular roadway should be one quarter of the total widths of the streets entering the place. I venture to make a suggestion showing the gyratory principle

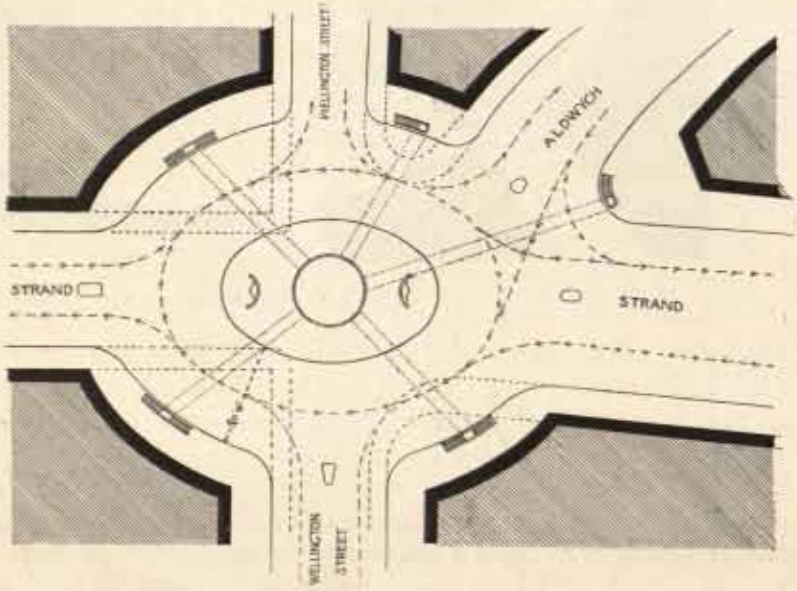


FIG. 2.—SUGGESTED TRAFFIC PLACE AT JUNCTION OF WELLINGTON STREET AND THE STRAND, SHOWING APPLICATION OF GYRATORY SYSTEM.

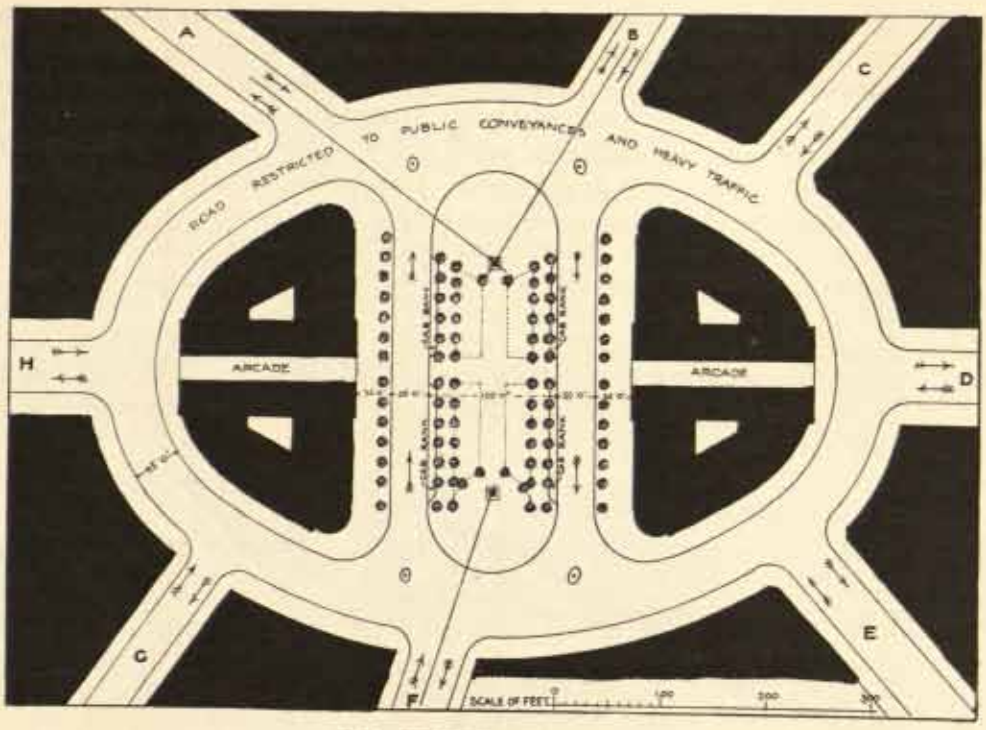


FIG. 4.—DESIGN FOR A TRAFFIC PLACE.

applied to what is one of the most important traffic crossings of London—the junction of the Strand with Wellington Street [fig. 3], where the loss involved by traffic being held up is said to amount to over 7,000*l.* a year. In this case it would be necessary to acquire property at three of the corner plots. I have indicated underground passages for pedestrians, but although they have been adopted in several congested points of London and Paris, the system has yet to be proved a success; they do not seem to be much used when provided, as apparently the mere fact of having to go down a stair keeps the majority of passengers on the surface.

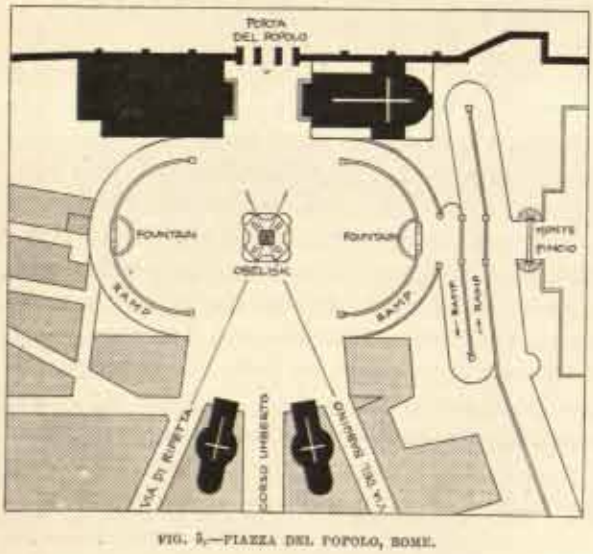


FIG. 5.—PIAZZA DEL POPOLO, ROME.

It is often impossible to avoid four or five streets converging. Where this happens, instead of directing them towards a central point, it is better to form an oblong or an elliptical place, both of which forms are preferable for dividing the circulation of traffic. The Place de la République, Paris, is a good example of an oblong traffic place; it measures about 325 yards by 130 between the buildings, with seven main thoroughfares entering, three at one end, two at the other, and one at each of the long sides. The whole of the centre of the place is occupied by a broad promenade with a fine central monument, two fountains, and double rows of trees. Where it is essential to restrict the area that can be devoted to such a place, a plan upon an oval form

might well be adopted. Fig. 4 shows a design for a traffic place entered by eight thoroughfares and occupying an area about two-thirds that of the Place de l'Etoile ; the centre is laid out as a broad promenade with a double row of trees, and monuments are placed at either end in such positions that they form vistas for streets A, B, and F. Tramways and omnibus routes would be restricted to the outer ring, and the traffic circulating through the central place would be divided into two streams. Any little inconvenience that this might involve in setting down would be compensated for by the increased speed due to the traffic being kept in one direction. Ample space is provided at those points where cross-currents occur, and islands are

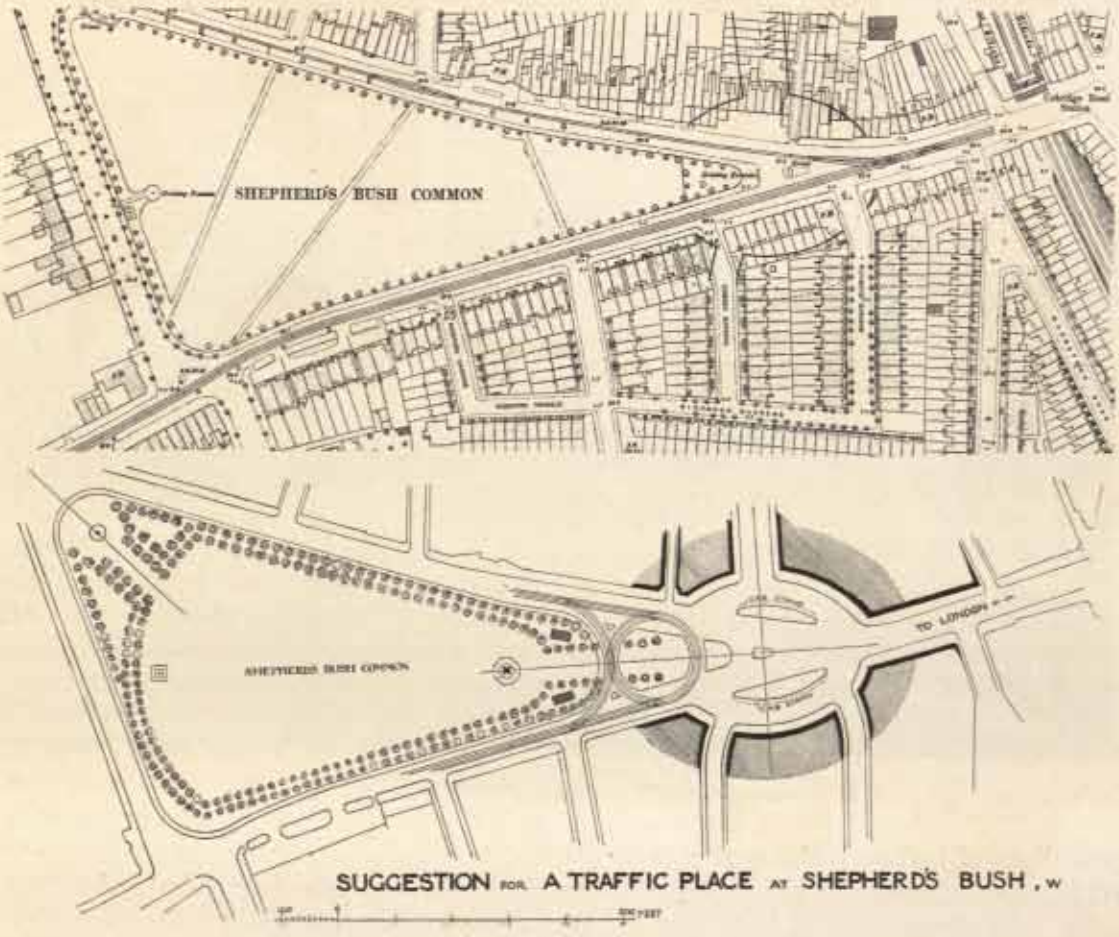


FIG. 6.

placed for pedestrians and to help control the traffic currents. Cab ranks are within easy hail underneath the trees of the central island and well out of the way of traffic. The central building blocks would be most valuable for shops, and would contribute considerably to the cost of the scheme, the two arcades being particularly well placed for business on one of the principal lines of traffic.

The half-circle is another suitable form for a traffic place, particularly where traffic coming from one direction has to be spread out, as at the principal entrances to towns, railway stations, bridge approaches, &c. The Piazza del Popolo, Rome [fig. 5], is a good example of this treatment, with an additional charm due to the clever handling of the surrounding architecture.

It frequently happens that where two important lines of traffic converge to a point, upon what may perhaps have been the boundary of a city, a triangular public place is formed and devoted to the purpose of a village green. I have noticed many such places, and there is one that will no doubt occur to many present, at Shepherd's Bush. Such a position as this would form an ideal situation for a well-planned traffic place. At the present time, I suppose because the tramway company and the local authorities are unable to come to some better agreement, the stampede that takes place at this point at busy times becomes almost a free fight, and tram after tram has to be laboriously shunted from one line to the other, instead of proceeding in an orderly continuous procession. An improvement might be effected with little difficulty upon the lines that I have sketched. This point, forming as it does the junction of the two



FIG. 7.—BAHNHOFPLATZ, HANOVER.

great lines of traffic on the west side of London, is already a most important local point. Within the next few years a large increase in traffic is certain to take place, as waste land to the north becomes developed. At present the tram lines are brought right into the thickest part of the traffic, but by the scheme I have suggested it would be possible for an ever-moving line of trams to circulate easily over the two systems to Ealing and Kew. Much of the property that would be required is now of quite an unpretentious character, but is likely to increase very considerably in value.

BUSINESS PLACES.

The various kinds of places devoted to business or pleasure, in which are included market-places, exchanges, and places for public shows and festivals, form a direct contrast to the places we have just been considering in that all through-traffic, both vehicular and pedestrian, is excluded. In the larger towns of England and on the Continent open markets have gradually

given place to closed ones; but in smaller towns and in suburban areas, where a demand still exists, they should certainly be encouraged, for, besides being a valuable municipal asset, if properly planned, they may confer great benefits upon all classes. Plenty of trees should be planted round the sides and in the centre, and every effort made to render the place attractive as a promenade, as well as a useful centre for shopping. It might also be possible to lay out such a place so that, in addition to being a market by day, it might be used for entertainment purposes in the evening, after the manner of some of the small Spanish *alamedas*. The long stretch of the Piazza Navona in Rome, adorned with three magnificent fountains, used as a

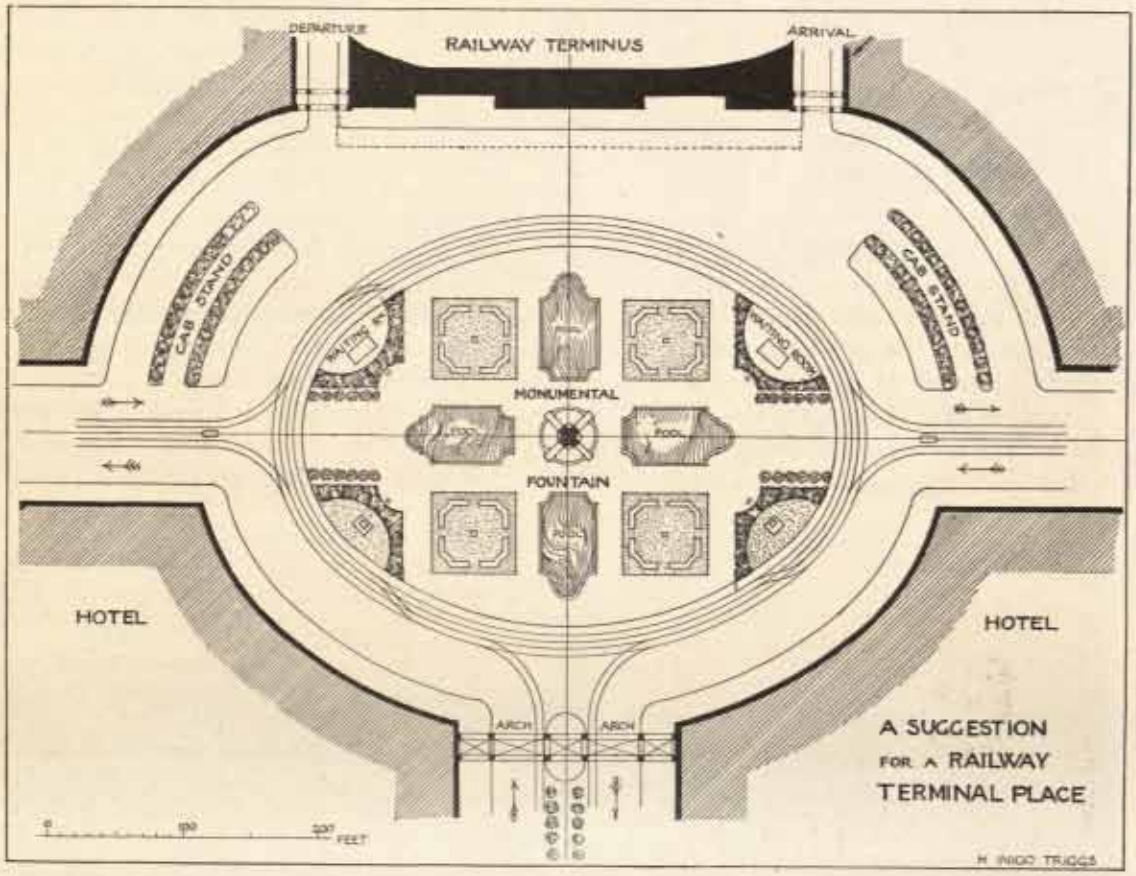


FIG. 8.

market by day, is illuminated and rendered charmingly attractive as a public dancing place by night.

The type of business place which on the Continent is known as the garage place, generally planned in front of railway stations, is almost unknown in this country. The railway station is the main entrance to the city, and as such it has taken the place of the old city gates. In America the Railway Corporations are realising that it pays to make station surroundings attractive, and many of the large European cities, like Hanover, Turin, Basle, and Milan, have laid out their garage places in a strikingly beautiful way, in order that the first impression of strangers arriving by rail may be a favourable one. The Bahnhofplatz at Hanover is in many respects a model of its kind; the place is semicircular in form, and for the better circulation

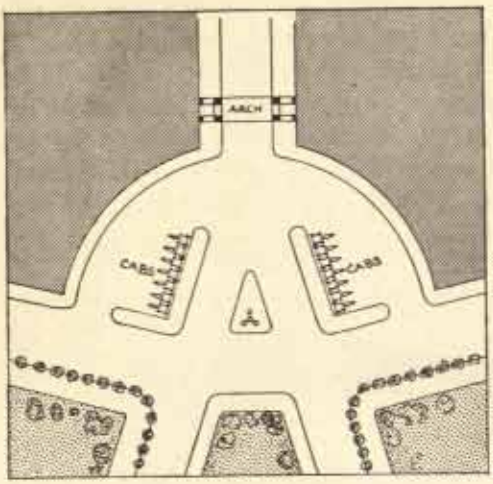


FIG. 9.—KARLSPLATZ, MUNICH.

of traffic the central part is laid out as a garden. Three large thoroughfares converge to the outer part of the place and take the traffic to either side of the station, the central roadway being reserved for cab-stands and smaller vehicular traffic. As in most cities on the Continent, the railway place is the principal starting place for the entire tramway system of the town.

I have made a suggestion [fig. 8] for a terminal place in front of a station about the size of Victoria. Cab-stands are arranged upon either side to take a double row of vehicles easily within hail and at the same time not too much *en évidence*, being partly screened by trees. The tram lines are planned so that this traffic may be kept continually on the move. Those who know the station place at Milan, or the wonderful way in which the trams are planned to circulate in the fine square in front of the cathedral in the same city, will realise how important this point is. The centre is laid out as an oval garden, with a monumental fountain placed as a termination to the principal vistas. Waiting rooms for trams form part of the design, and a monumental archway gives a sense of enclosure and affords a worthy entrance to a city.

Another form of garage place which is badly required in all our cities is a properly equipped place for the hiring of vehicles. In planning city extensions and improvements all provision for this kind of place is invariably omitted, and for want of better arrangement vehicles



FIG. 10.—PLACE DE LA CONCORDE.

for public hire are placed in the centre of roadways or allowed to block up the sides. A good plan is that of the Karlsplatz at Munich, where the cabs are arranged in a kind of recess easily accessible from the footway.

PLACES PARTLY SURROUNDED BY BUILDINGS.

The Place de la Concorde, Paris, is a good example of a place partly surrounded by buildings. It is planned at the crossing of two important axial lines, north and south from the Madeleine to the Chambre des Députés, and east and west from the Tuileries to the Arc de Triomphe. Though smaller in area than the largest in Berlin and Vienna, it is one of the finest examples of a monumental place in the world. The place has passed through many phases since it was first laid out; the statue of Louis XV. that formerly stood in a central position was destroyed during the Revolution, and in 1836 the Obelisk of Luxor and the two monumental fountains were erected in the centre. The traffic requirements forced Haussmann, to his great regret, to fill up the sunken parterres. The place is bordered by a monumental balustrade, with two large stone figures at each of the four angles representing the chief towns of France, and twenty bronze rostral columns complete the decoration. The densely planted trees on the sides of the Tuileries and Champs Elysées take the place of an enclosing frame.

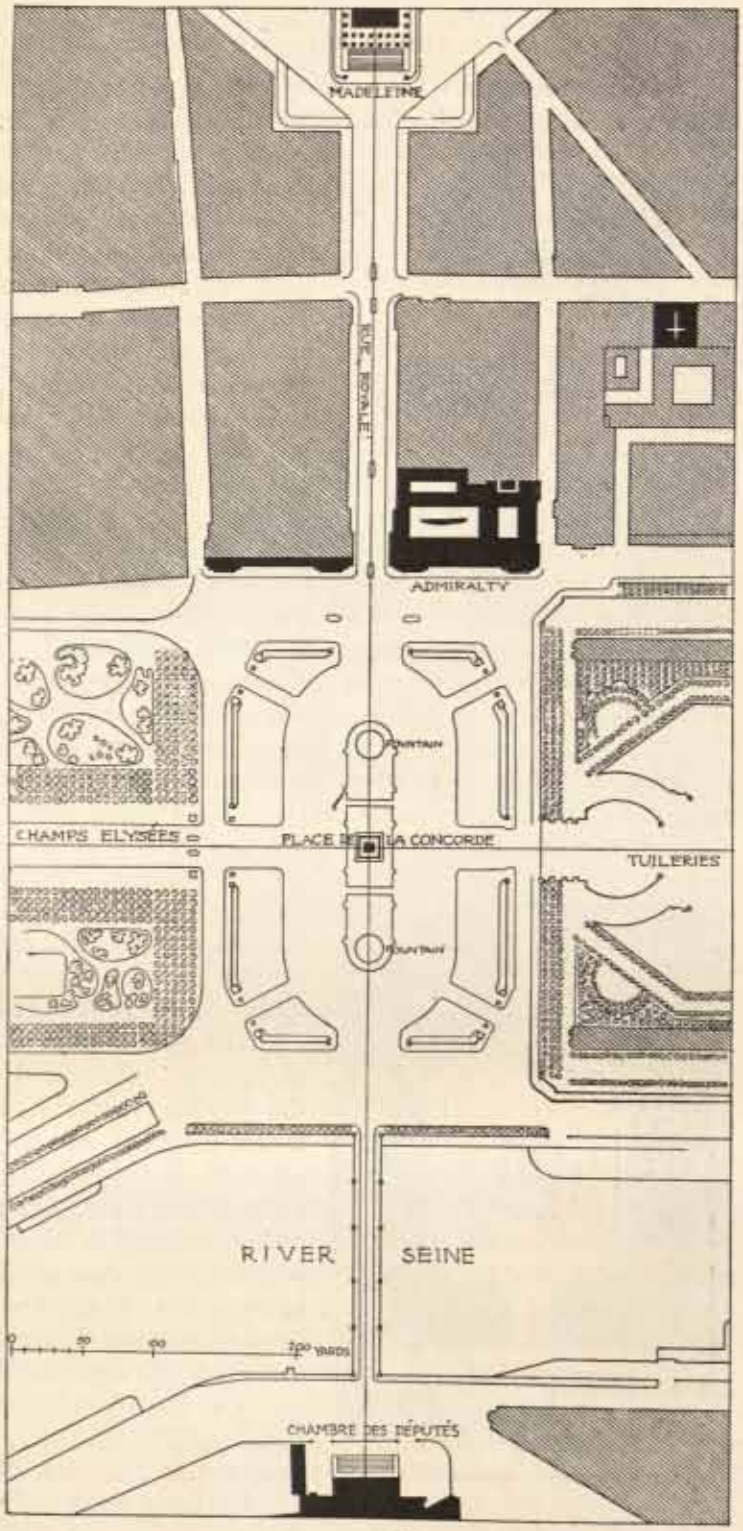


FIG. 11.

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PLACES ENTIRELY SURROUNDED BY BUILDINGS.

Public squares that are entirely surrounded and enclosed by buildings are likened by Stübben to the salons of a town, just as the streets may be compared with the passages, the traffic places with the lobbies and halls, and the garden squares with the living rooms, of a house. Such squares do not require a long street vista to set them off properly; it is better that they should rely for their effect entirely upon their own architecture, a suitable grouping of the buildings, and a due sense of proportion between the height of the buildings and width of the place. The surrounding architecture, whether regular or irregular, should be regarded as the frame to a picture; the street openings breaking into it should be as few as possible, and where it is impossible to avoid a number of openings some of these might well be bridged over. A regularity of form is by no means essential, and indeed is often very difficult to discern; thus, in St. Mark's Place at Venice we see how deceptive such a plan may be when put on paper, for to the majority of observers it would be impossible to detect that the length of the two shorter ends is not identical. In a formally laid-out place, the architecture should be formal and grouped, though of course not necessarily of one identical pattern. A geometrically laid-out place, enclosed within parallel lines, is an artificial and formal creation, and to give it its full effect requires artificial and formal buildings. Where such a place is not designed on formal lines, and, as in the case of most of the old market-places on the Continent, an irregular and picturesque character dominates the site, the surrounding buildings should themselves partake of that character. But every enclosed place should belong definitely to one type or the other, and any attempt to blend the two is hardly likely to be a success.

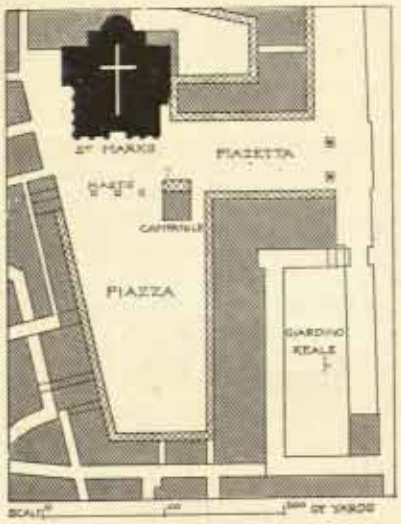


FIG. 12.—ST. MARK'S PLACE, VENICE.

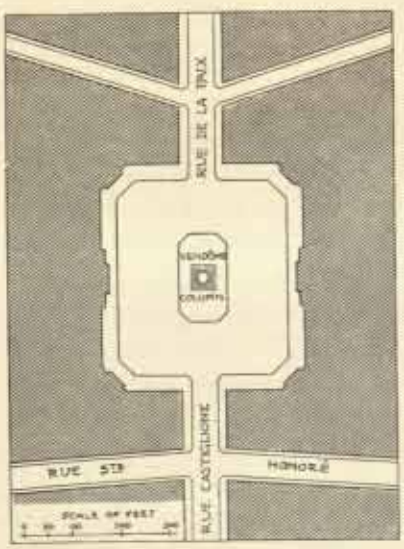


FIG. 13.—PLACE VENDÔME, PARIS.

The oblong form is that most generally used for an architectural place, and an agreeable proportion between the long and short sides is one to three. The square form is also pleasing, especially if the streets enter at the four corners. The triangular form is not often used for an architectural place. Circular places are generally too regular and geometrical to be pleasing, and the oval form is better both from the point of view of circulation of traffic and also as being more adapted to the display of monuments. As we have already seen in the Piazza del Popolo, two semicircles combined with straight sides produce a fine decorative effect.

The Place Vendôme, Belgrave Square, and the Amalieborg Platz, Copenhagen, illustrate the effect of placing the four corner buildings at an angle of 45°. In the Place Vendôme the centres of the long sides are emphasised by slight projections which serve to break up the monotony of the skyline. A fault in the planning of this square is the danger to pedestrians of having to cross a wide area of roadway, unless they

care to walk all round the footways. This arrangement is inevitable where the centre of such a square is occupied, as here, by a monument. The same remark applies to the Amalieborg Platz, where, however, the inconvenience is not so severe, on account of the smaller amount of traffic. In both these examples the size of the place has not been exaggerated, and the relative proportion between the height of the buildings and the area of the square is pleasing. The result of scattering the buildings is shown in the Königsplatz, Munich, where the width of the place is very much exaggerated, and the three monumental buildings would appear to better advantage if the width had been lessened to about two-thirds its present dimension, and if at the same time a better frame had been provided and the awkward-looking angles filled in with architecture. In the Lustplatz, Berlin, where the surrounding buildings were scattered, the



FIG. 14.—LUSTPLATZ, BERLIN.

necessary framing has been imparted by a double row of high trees, and the vehicular traffic has been diverted to either side, leaving the whole of the centre part for gardens and promenade.

The Maria Theresien Platz, Vienna [figs. 15, 16], is largely laid out as a monumental garden place, particularly suited to its purpose of rendering the two museums on either side free from dust and noise. In the centre is the monument to Maria Theresa, with well laid out parterres and fountains. Gottfried Semper prepared a scheme for continuing the place and including the Hofburg buildings which, if ever carried out, would make this the largest and finest architectural place in the world.

The idea of an architectural square of uniform buildings probably originated in Paris, where the Place Royale was laid out by Henri IV. in the early years of the seventeenth century. It is an exact square of 152 yards, and the surrounding architecture and arcades still retain much of their original character. The Place des Victoires, laid out from Mansart's designs in 1685, was another regularly laid out place; at intervals of every ten feet or so Ionic



FIG. 15.—MARIA THERESIEN PLATZ, VIENNA.

pilasters supported the cornice, and the vertical lines effectively broke up the curved surface; the angles of the streets entering the circus had strongly marked rustications. Unfortunately it has not preserved its architecture intact to the present day, and has been completely spoiled in consequence. The district appears to have fallen upon evil times, with the result that the owners of the houses have made no attempt to adhere to the original design. This is, of course, the great danger in architectural squares belonging to many different owners, unless, as in some of the more important Parisian examples, an ordinance forbids owners to deviate from one design.

From France the idea of the Place Royale was soon imitated in London, where, about 1620, a Commission was appointed by the Crown to "plant and reduce to uniformity Lincoln's

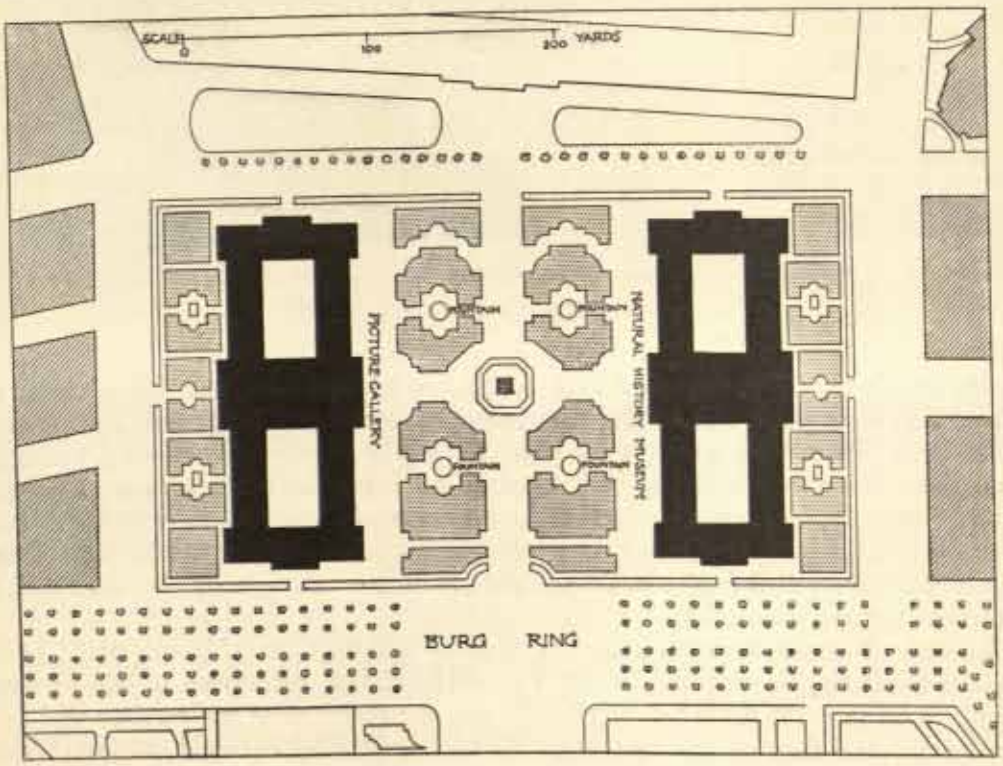


FIG. 16.—MARIA THERESIEN PLATZ, VIENNA.

Inn Fields as it shall be drawn by way of map or ground plot by Inigo Jones." Like the Place Royale, it was proposed to surround the square with private houses, forming one continuous façade, broken only in the centre and at the angles by buildings rising slightly above the rest. A few years later the idea was imitated in a grander form in the piazza of Covent Garden, where an arcade was carried along the whole of the north and east sides; the church completed the west side, and the south was enclosed by trees. The idea, once started, soon grew into favour, and towards the end of the eighteenth century an increasing demand for dwelling-houses of a more stately character resulted in many large London estates being dealt with as a whole. The usual plan was to form a large open square, to plant trees and shrubs therein, and to design the houses with a view to their architectural symmetry.

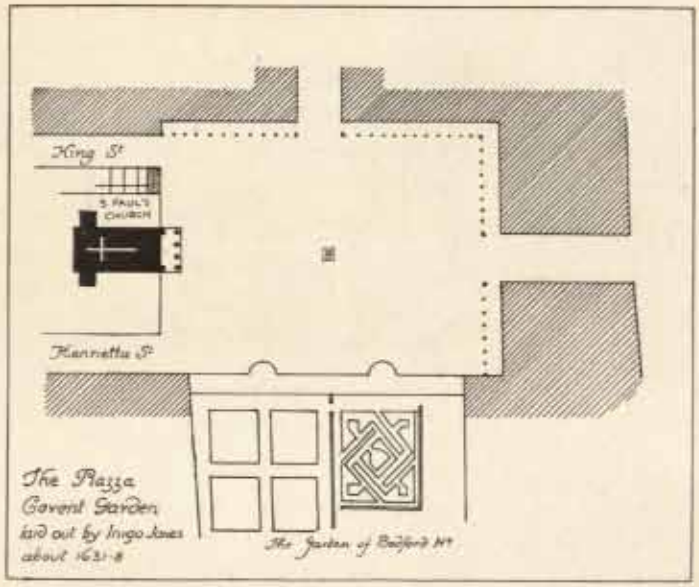


FIG. 17.



FIG. 18.—COVENT GARDEN PIAZZA. FROM A DRAWING BY T. SANDBY.



FIG. 19.—JARDIN DE LA FONTAINE, NÎMES.

PLACES LAID OUT FOR PURPOSES OF ORNAMENTATION.

There is this great difference between a garden place and the other types of public place. The latter, traversed in all directions by currents of traffic, may be as dusty and noisy as the street itself; but the garden place is essentially a place of repose and a retreat from dust-laden streets, and should be treated as such.

To make any attempt at landscape gardening in a town square bounded on all sides by solid blocks of buildings seems hardly likely to be a success. The treatment of such a square should be in architectural and formal manner. Any embellishment that it may receive should be monumental in character, such as stone terraces and steps, monuments and statues arranged in harmony with the environing buildings, and disposed in such a way that they will not conflict with the usefulness of the place. If the space permit, a rectangular alignment of shade trees could be introduced, with just sufficient amount of turf at their base to protect the roots from too hard a surface and also to soften the harshness arising from an expanse of stone or asphalt paving. But the introduction of turf or trees should be completely subordinated to the



FIG. 20.—GARDEN OF THE TUILERIES.

architectural character of the place, and should be so carefully arranged that the walking space should remain practically undisturbed.

When we remember how country-loving a person the average Englishman is, and that English private gardens are undoubtedly the finest in the world, it is certainly surprising that so little is done towards making our public places more attractive by the planting of trees, shrubs, and flowers. In London squares as they now exist nothing is more noticeable than the want of colour. We see them invariably surrounded by a dense and forbidding mass of lilac, and the principal object of their existence is to shut out all view of their lawns from the gaze of the passer-by. Even in those squares that have been handed over to the public care the tradition of reserve is still kept up, and of colour and flowers there are none. Of course, brilliant flowers will not flourish under spreading trees, but there are plenty of openings and spaces which a skilful gardener could utilise.



FIG. 21.—TREILLAGE SURROUNDING BEETHOVEN PLATZ, VIENNA.

An idea well worth considering is shown in fig. 21, illustrating the treillage screen surrounding the Beethoven Platz, Vienna. In this case treillage has been used with remarkable effect to enclose the place until the limes have had sufficient time to grow up; the treillage will then be removed, and the trees will form a kind of green cloister round the place.

PLACES PLANNED AS FORECOURTS TO PUBLIC BUILDINGS.

Forecourt places are particularly valuable as a means of exhibiting the architecture of an important public building to its best advantage. It is inadvisable that important buildings should be erected in a line with the frontages of the other buildings in the street; and if it is possible to set them back somewhat, an air of greater importance is imparted, and at the same time they gain considerably by being seen in a more favourable perspective. In France the forecourt (*cour d'honneur*) is a very favourite device, and few important public buildings are planned without it. For such buildings as churches, museums, or art galleries a forecourt ensures greater quietude and freedom from dust. Herr Brinckmann has pointed out * that classic places differ from mediæval in being almost always treated as forecourts. A fine example of such a place is that planned in front of the Farnese Palace, where several broad streets lead up to a well-proportioned place. The vista extending on both sides of the palace enables the spectator to obtain a fine view of the front elevation in sharp contrast to the side perspective. The small *piazze* in front of the churches of S. Maria della Pace and S. Ignazio

* A. E. Brinckmann, *Plätze und Monumente*, Berlin, 1908.

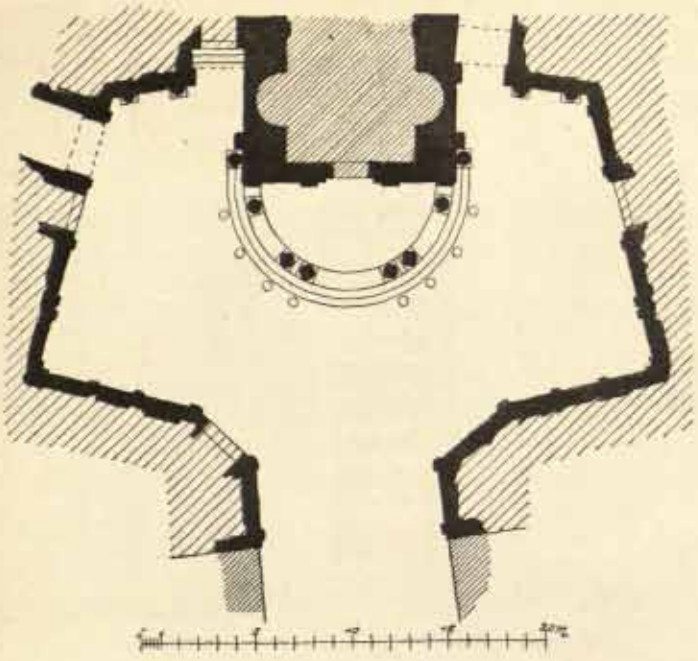


FIG. 22.—PIAZZA S. MARIA DELLA PACE, ROME.

in Rome are both interesting examples of smaller Renaissance forecourts; the former, planned in 1656, is largely occupied by the semicircular portico of the church. The approach to the church of S. Ignazio has been so contrived that the sense of enclosure has been retained by dividing the main approach into two minor ones.

The finest and most monumental place of this kind in the world is that which Bernini planned in front of St. Peter's [figs. 24, 25]. The place consists of three parts—the Piazza Rusticucci, surrounded by hotels and shops; the large oval piazza, 370 yards by 260; and beyond that a forecourt with steps leading to the principal entrance. The great piazza is enclosed with an open double colonnade, and the forecourt with a closed *loggia* of grandiose proportion. The ground level of the oval place falls slightly to the centre; but, beyond, it rises towards the entrance to the cathedral.

It was originally the intention of Sir Christopher Wren to surround St. Paul's Cathedral by a colonnade similar in treatment to Bernini's; fig. 26 shows the design which he made for this scheme, taken from a plan preserved in the Soane Museum. The junction with Fleet Street was well contrived, and had the funds been forthcoming at the time the appearance of St. Paul's Cathedral would have been immensely improved and its precincts rendered more secluded. At Naples the Piazza del Plebiscito is an example of the enclosed colonnade treatment on a large scale, but it suffers somewhat from the insignificance of the central architectural feature, the church of San Francesco di Paolo.

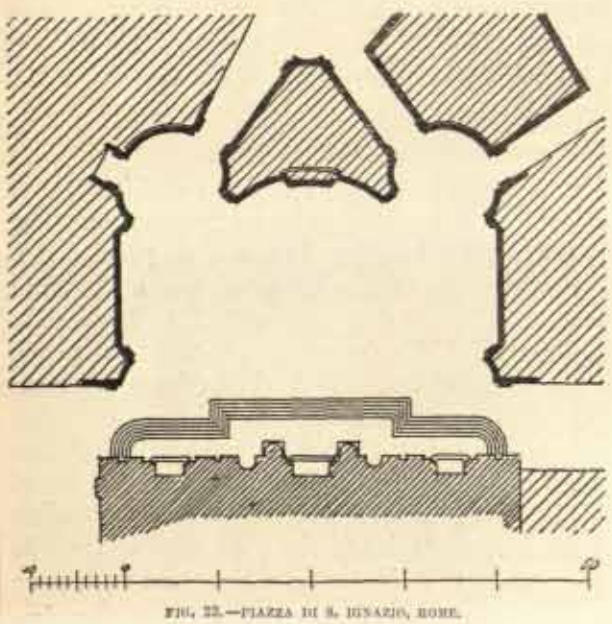


FIG. 23.—PIAZZA DI S. IGNAZIO, ROME.

Another example of a forecourt place, though planned on a more humble scale, is the Place de la Trinité, Paris [fig. 27]. As at St. Peter's, it shows the good result of raising the monumental building well above the surrounding ground level. In



FIG. 24.—PIAZZA DI S. PIETRO, ROME.

this case a double ramp encloses a small oval garden and ascends to the *porte cochère* of the church.

The immense courtyards in front of the palaces of Versailles and Caserta are examples of approaches planned upon a vast scale. The former [fig. 28] consists of three separate courts—the inner courtyard, or *Cour de Marbre*, enclosed by the wings of the palace; the outer courtyard, or *Cour Royale*; and the third fan-shape courtyard, or *Place d'Armes*, for great public reviews and displays. The effect of the approach is marred by the lowness of the palace buildings and the lack of an imposing central feature (compare Charlottenburg Palace, where a well-proportioned dome dominates the courtyard), and also because the *Place d'Armes* rises considerably and obscures the base of the buildings. At the palace of Caserta, near Naples, five broad roadways diverge upon an immense oval court, the two axes of which are 360 and 230 yards respectively; it is thus probably the largest oval courtyard in existence. The palace is set back, surrounding a second oblong court. A very favourite device in eighteenth-century palaces was to spread the approach place out in the form of an immense fan and surround it with dependencies, as at Nymphenburg, near Munich. A far more architectural and dignified form is that of the Schlossplatz at Coblentz [fig. 29], where the palace buildings surround three sides of an inner garden courtyard, the central axial line amounting to over 300 yards. Many of the French eighteenth-century *châteaux* have delightful forecourts that might well be imitated in modern town-planning schemes.

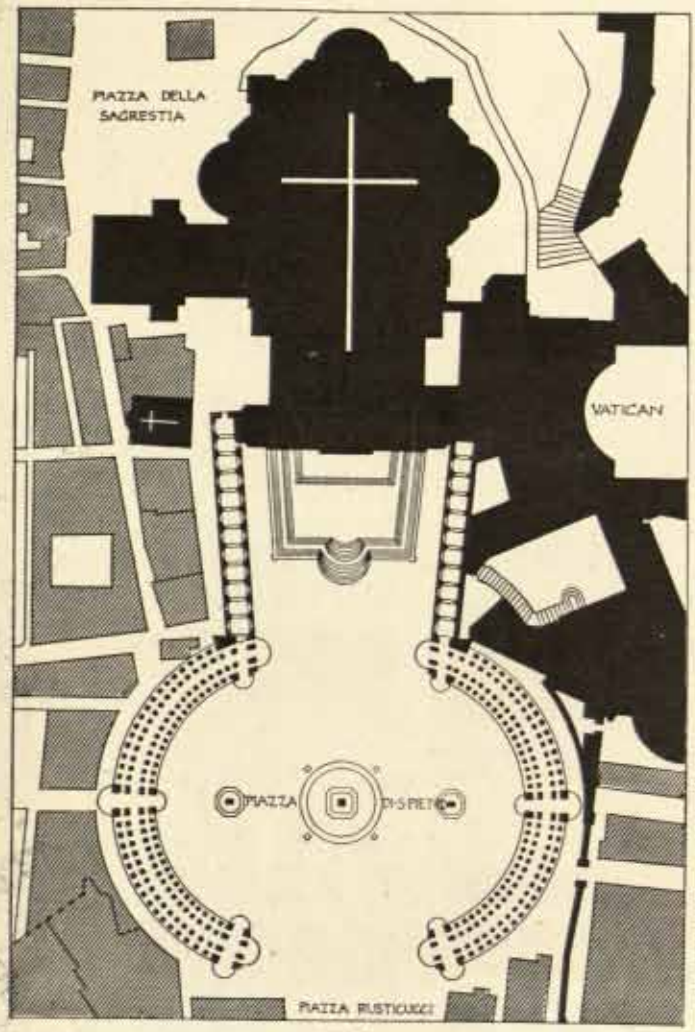


FIG. 28.

PLACES WHICH ARE PARTLY BUILT UPON.

In the last group are gathered those places which are partly built upon. These frequently occur in cities where triangular and irregular sites have been created by intersecting thoroughfares, and are suitable for the erection of such buildings as churches, museums, and picture galleries, whose character demands an important open site on account of their architectural importance and of the necessity of obtaining light on all sides. Extremes of narrowness and width are to be avoided; an exaggerated width leads to a feeling of emptiness which it is not

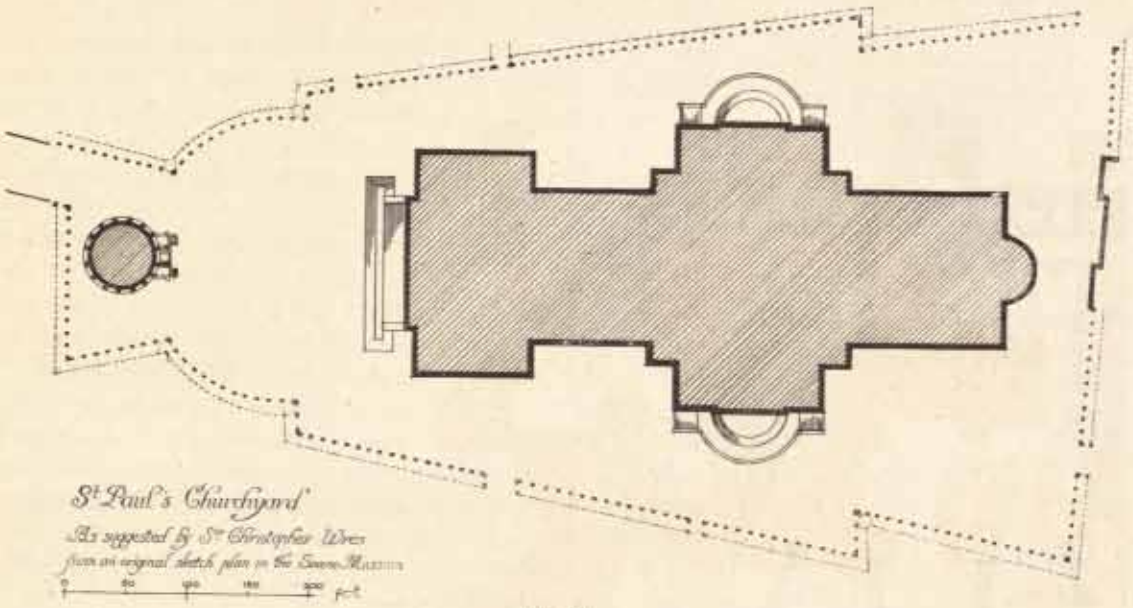


FIG. 26.

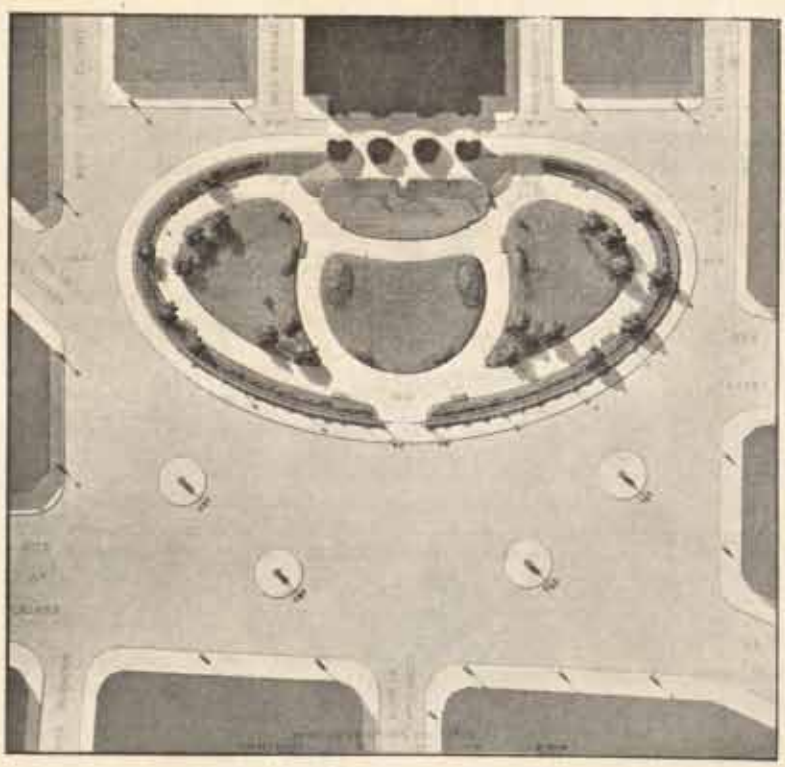


FIG. 27.—SQUARE DE LA TRINITÉ, PARIS.

easy to disguise by tree-planting and gardens. It is, of course, difficult for the designer of the place to estimate the probable height of the building to be erected, and the future might generally be left to the sensible treatment of others, if the authorities on their part would only insist on the importance of recognising the necessity of proportion between the width of the place and the height of the adjoining buildings. This class of place demands skilful treatment where it occurs in a position terminating a vista and forming the meeting-place of several traffic arteries. In this respect most of the best examples are to be found in Paris, where the importance of obtaining a series of imposing street vistas has been better realised than in any other city. In the smaller English towns we often find the market-hall placed in the middle of an open place, as at Abingdon and Peterborough, with a very pleasing effect. In larger examples the traffic requirements demand that the buildings shall be set well back from the traffic currents, and the many instances we find of the violation of this rule result in great disturbance to the traffic. The Place de l'Opéra and Place de la Madeleine, Paris, and the Gensdarmen Markt, Berlin, are good examples of ornamental places, though varying considerably in their character. The first is planned upon a lozenge-shaped site overlooking the Place de l'Opéra and termina ting a superb vista from the Place du Théâtre Français along the Avenue de l'Opéra, among the finest vistas in Europe. The entire scheme is perhaps the greatest result of Haussmann's remodelling, and architecturally one of the finest examples of town-planning in Europe, though from a traffic point of view it leaves much to be desired.

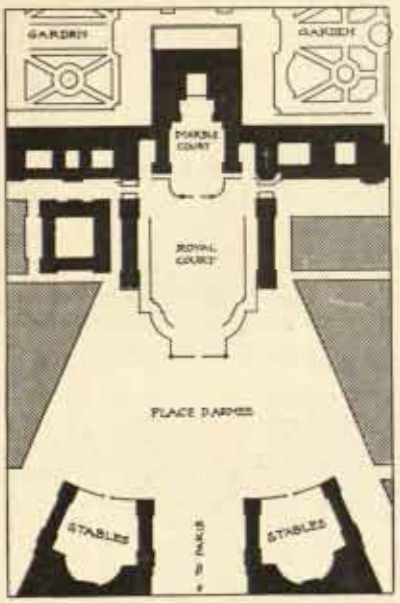


FIG. 28.—VERSAILLES.

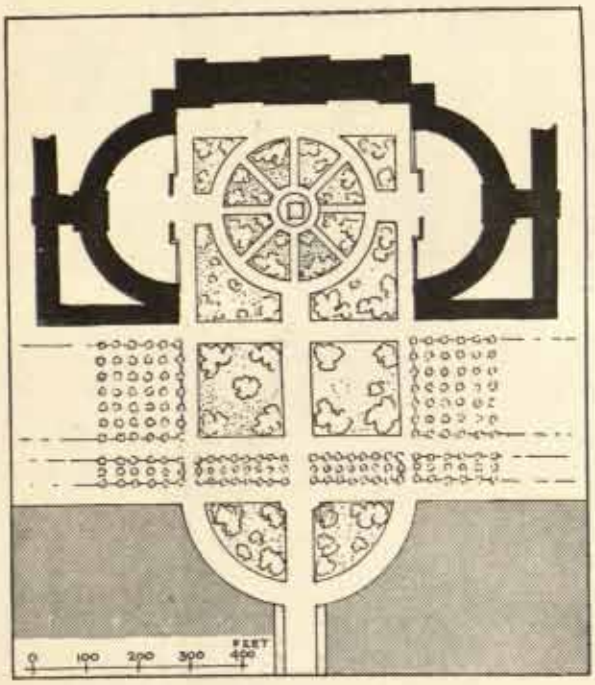


FIG. 29.—SCHLOSSPLATZ, COBLENTZ.

In conclusion I desire to express my sense of gratitude to this Institute for the honour they did me three years ago by conferring upon me the Godwin Bursary, by which means I was enabled to study the planning of public places in Paris, Berlin, Munich, and Vienna. Fine as these may be, we Londoners can proudly boast that London stands unrivalled amongst European cities —I think I might say amongst the cities of the world—in possessing the largest number of public open spaces, both in proportion to her acreage and also to the number of her citizens. For this fortunate state of affairs we owe a debt of gratitude, first of all, to those big landowners of the eighteenth century who endowed London with such a magnificent series of squares; and, secondly, to the splendid efforts of the County Council

and private societies who have interested themselves in the acquisition of every public space that has become available. It is a curious fact that, whereas London has enormously increased her open spaces, Paris during the last century has allowed them to decrease from 960 acres in 1789 to 330 acres in 1900. Now, having this splendid series of public open spaces, may we not justly reproach ourselves as architects with the poor use that has been made of them? I venture to think that such a superb site as that offered by Trafalgar Square, with its broad gentle slopes, would have been treated in a far grander way in either Paris, Berlin, or Vienna. How such a site, the centre of the metropolis, would have appealed to Haussmann! That we have failed, failed signally and lugubriously, to make the most of our public squares must, I fear, be admitted; but still let us hope that with a better educated public opinion we are on the eve of better times, and it behoves us members of this Institute in London to see that when the day comes that the squares of London fall into the hands of the public, as I feel convinced they eventually must, the borough councils will realise that it is not sufficient merely to open the gates, or remove the railings, but that whether these squares be replanned as traffic-distributing centres, as forecourts to great public buildings, as gardens, or for purely ornamental purposes, they are the most powerful factors that remain to us for the beautification of our great Metropolis.

DISCUSSION OF MR. TRIGGS'S PAPER.

Mr. Ernest George, *President*, in the Chair.

[Mr. Triggs unfortunately was prevented being present at the Meeting owing to an attack of bronchial catarrh, and at the request of the President his Paper was read by the Secretary. The illustrations, consisting of lantern slides provided by Mr. Triggs, were projected upon the screen at points in the Paper carefully indicated by the author, hence no further explanation was needed than that afforded by the Paper itself. Displayed on the walls were a numerous collection of drawings, prints, and photographs, for the most part the originals of the illustrations in Mr. Triggs's recently published book on Town Planning. The Institute is indebted to Mr. Batsford for kindly lending a series of rare and exceedingly fine engravings depicting some of the principal London squares as they appeared in the middle of the eighteenth century.]

Mr. H. V. Lanchester [*F.*] said it gave him great pleasure to move a vote of thanks to Mr. Triggs for his Paper, which displayed so much research on the question of these public places. Architects were greatly indebted to him for the breadth of his studies in this direction. As they knew, in the book he had recently published on town planning generally he had gone a great deal further into the matter. If Mr. Triggs had been present he should have liked to put one or two questions to him. Mr. Triggs, for instance, had referred to the axiom that more depends on the placing of important structures than on the structures themselves. That perhaps might be regarded as true under the system adopted in the formal school of civic design; but he believed the opposite was true when design was looked at from the point of view of the advocates of the informal system. He had read with great interest lately several articles on the informal method of civic design; it was scarcely fair perhaps to call it the informal method; it arose simply through the adoption of the natural lines of traffic and the obvious utilities of the primitive city. It sometimes occurred that the cities, which had originally been laid out instinctively, possessed a charm that was often lacking in those which had been laid out with the most studied art. The beauty of such cities seemed to depend on the design of the structure having been adapted and most artistically considered with regard to the accidents of its position. That, perhaps, would afford some clue to the reconciliation of the difference between the standpoints of the two schools. One school said "Let us have buildings adapted to the position; however curious and irregular the position may be, let us, as architects, study its irregularities, and out of these irregularities secure all the charm that can be obtained." The other school said "Let us study the position of our buildings, and, if the buildings are reasonably good, then they will tell of themselves." That was a distinction he should like to make between Mr. Triggs's axiom and the other axiom that seemed to him equally important. It was not quite clear to him what Mr. Triggs's intention was with regard to a semi-circular place at Hyde Park Corner; he should like to have seen some illustration of the proposal. With regard to the garage place outside the railway station, in England they were

rather inclined to adopt the system of a circulating arrangement for public vehicles like cabs, which circulated from one end of the station to the other, rather than accommodating them in a *place* outside the station. Of course the *place* was necessary for the traffic of trams and omnibuses; but we were working on a more or less slipshod basis with regard to the circulation of vehicles through our railway stations. That, however, was a matter for the railway companies rather than for public interference; a great deal might be done to make the circulation easy and flowing and natural. He was very interested in Mr. Triggs's division of the types of *place*, and he should like to add a few words to his definition of the forecourt *place*. The forecourt *place* was a thing that seemed difficult for the Northern mind to understand; but it had no doubt grown up from the feeling in the south that there should be some graduation in passing from the outside to the interior of a building. A building and its surroundings were not distinct things, as we were apt to feel in the North. All the important buildings of the classic period were surrounded and connected with *loggie* that broke the suddenness of passing from the bright sunlight into the comparatively gloomy interior. They managed that very skilfully by passing through first, perhaps, an open courtyard and then a loggia, and thus into the interior of the building, as might be seen in many of the temples and basilicas of Egypt, Greece, and Rome. The same idea was evident in the narthex of the early Christian churches, and from this one got (in Renaissance times) the forecourt or forecourt place. This feature is of the greatest importance in the South, and one cannot help feeling its architectural value, even in our more Northern climes, as a solution of the problem of transition between the open street and the interior of the building.

Mr. PAUL WATERHOUSE, M.A. Oxon. [*F.*], in seconding the vote of thanks, expressed his regret that Mr. Triggs was not present. However well a Paper might be read by another man—and it had been most ably read—it was much better to hear it delivered by the author and to have the little *obiter dicta* that were generally thrown in. The whole question of the planning of "places" was one which, so far as it had any practical bearing for architects—and sometimes it seemed as if it never could have any practical bearing for architects—must be intimately wrapped up with the general principles of town planning. When talking of the general principles of town planning we were sometimes in danger of forgetting that the so-called general principles were in reality very much divided into classes. It had to be remembered, to begin with, that the needs of large cities were very different from the needs of small provincial cities. In the small cities a single centre was a desirable and convenient and beautiful thing; but in large cities a single centre was an obvious impossibility, and altogether undesirable from the point of view of either utility or beauty. Then there was the other division of the subject—namely, that part of the efforts of the town planner were necessarily directed to the remodelling of old cities, and the rest of his energies would be devoted to planning new cities, if he got the chance. It might be said that the entire new planning of a large city was an impossible thing; but he should like to insist that the entire planning of a large city was really within the range of practical energy—or rather that it was borne in upon us as a matter of practical importance, for this reason, that if any man had the luck to be given the chance of remodelling a large city such as London, the only way in which he could do it would be by setting before himself on the one hand the existing state of things and the present needs of the city, and on the other his ideal vision of what he would do with such a city on such a site. He would hold before him the needs of the present and the ideal possibilities of the new city on the same site, and he would do his best to blend the two together. A capable and distinguished architect, he supposed, could have no more horrible nightmare than to dream that he was approached by some great power in the British Empire—the Chancellor of the Exchequer or the House of Lords, or whatever power happened to be supreme at the time—with an offer of a salary, say, of some thousands a year, an office rent-free, and as large a staff as he pleased, and that he was to redesign without restriction the capital of the Empire. He might be told, for example, that he need not consider the existing London—he might put it where he pleased; he might have a site level or mountainous as he preferred, with or without a river just as he wished, and he might either take the existing London away and rebuild on the same site or build it anywhere else within the British Empire. Such a problem, from the very withdrawal of restriction, would be so great a burden that the consolation of those thousands per annum would go no way to relieve it. Fortunately all these problems had to be attacked through obstacles. The town planner, like the house planner, had the joy of achieving his results not through limitless opportunities, but by a battle with hindrances. But unhappily we were scarcely ever given the chance of meeting the hindrances and obstacles. There was our grievance—the real root of our unhappiness over the town planning question was that we did not see how the remodelling even of our own London was to come within the range of practical politics. Before sitting down he should like to renew an old suggestion—that the Traffic Commission of which we once heard so much and of which we now heard nothing, whose many volumes had been read he concluded by very few people and were unknown to a great many, should be allowed to bear fruit. That Commission had done an enormous work in bringing together the data and the very foundations of the difficulty of the

traffic problem in London. Within those volumes would be found the whole of the traffic problem of London systematised, analysed, divided, and set out in such a way as to show where the shoe pinched in every part of London. That Traffic Commission concluded its labours in a practical way, so far as being practical on paper was concerned, by showing that streets might be made through our existing dear old London in such a way that one could get from place to place with much greater ease than at present. In his opinion all that was needed, in addition to that scheme, was that it should be nurtured architecturally—doctored architecturally. It might be remembered that the Institute had once given him the opportunity of showing one out of many possible ways by which the lines of routes there suggested could be harmonised and brought into convenient alignment with some of the existing buildings of London.* He wanted once more to express a hope in public that something might result from the Traffic Commission's Report, and that a day might come when some architect, or body of architects, would be engaged to help the formation of new streets from their inception—that is to say, that schemes for remodelling the streets in London should be hatched out from the beginning with the assistance of architects and carried through with architectural assistance. Mr. Triggs had alluded to gyratory regulation or regulated gyration. One great solution of the traffic difficulty at complicated crossings was, he believed, to be found in regulated gyration; that is, say, that vehicles coming to a point where several roads met, instead of darting across the open space to the road they wanted to take on the opposite side, which created confusion, should be compelled always to turn to the left, and go on until they came to the turning they wanted to go out from. Many of them, he supposed, thought they had invented this system—he was glad to see the author's name given at last. There were, however, two great difficulties in it: one was that the driver would be obliged to keep very close to the near side, otherwise he would be cut off, by vehicles inside him, from taking the turn he wanted and he might have to go on past his turning. On the other hand the foot-passenger would not be able to get across at all; therefore, it must be accompanied by subways, and he should greatly like to see a "regulated gyration" crossing tried somewhere in London. He should also like to see what he believed to be the best solution of the direct crossing difficulty tried again, though it had been tried already in London—he meant the viaduct system. There were one or two places in London still remaining where a great deal of time was lost by the traffic being held up, and where he felt quite sure the over-and-under principle could be applied with the greatest possible success. That principle again would have to be safeguarded by devising some means of bypass to get the traffic from the low level to the high level.

MR. HEATHCOTE STATHAM [*F.*] said that reference had been made to towns in which the street lines had been taken from natural lines. What were natural lines? He should like to know what that meant? How did it come about that the High Street of Oxford had that sweeping curve, as Wordsworth said, "The streamlike windings of that glorious street"? He supposed there was some little irregularity in the demarcation of the property at the outset, and he should presume really that that was what had given rise to what was called the "natural" planning of streets in old mediæval towns—that they originally began as lanes past somebody's fields, and the fields were of irregular shape. But he did not see in considering the question of planning a modern town what they had to do with natural planning. A town was an artificial thing; they had to think of it so, and to treat it as such. He had noticed that in all recent plans of modern cities, or for improving modern cities, there seemed a tendency towards the adoption of oblique lines and radiating lines of streets, or a combination of what might be called the gridiron plan with the radiating line. There was a great deal to be said for the radiating principle of streets in regard to vista and effect, and also in shortening the distance from place to place; but, on the other hand, from the point of view of the buildings, it left a great many very awkward plots—awkward to plan and awkward to treat architecturally. In Paris—though it was a city he was very fond of—the radiating plan, he thought, had been carried rather too far—one got tired of it. There was also an objection to a stranger that a city that had radiating lines, unless one knew the city very well, became very puzzling; if he forgot exactly where he started, he had no right angles to guide him, and he began to forget where he was going. On the other hand, it must be admitted that the gridiron plan, while it afforded very good building plots, was a plan that obliged one to go round two sides of a square or a parallelogram if one wanted to get from one side to the other. So that there were difficulties on both sides that required to be remembered. With regard to the question of forecourts, was not the great reason of forecourts really that of architectural effect? To make a building worth looking at, a sort of preface, as it were that put to it; it was put back from the road so, was there was space to admire it, and greater importance was given to it. Also in the case of railway stations and places of that kind, into and out of which there was a very large stream of traffic constantly going, the forecourt was a most important provision in point of convenience, because it prevented a stream of cabs

* "Some Observations on the Report of the Royal Commission on London Traffic, with special reference to the Proposed Formation of New Thoroughfares," by Paul Waterhouse [JOURNAL, 26th May and 16th June, 1906].

being turned straight into the street line of traffic; they were given a little time and space in which to arrange themselves and to see their best way out. In London it seemed to him that the great mistakes that had been made at several points had been from the exclusive consideration of streets without consideration of the points between them. That was the fatal mistake in what he considered one of the greatest blunders of modern times, the treatment of Hyde Park Corner. In the first place, in his opinion that Constitution Hill Arch ought never to have been moved. It formed a parallel line with Apsley House before. It had been taken away and placed at an angle where it faced nothing and looked up to nothing; the streets were laid out by the surveyor (or whoever laid them out) in the most inconvenient route for traffic, and the spaces between them were a sort of shoulder-of-mutton triangles with no *raison d'être*. The minute he saw them, he said "That's not an architect's plan; that's an estate agent's plan." There was the same blunder in the fatal attempt that had been made to do something with the Marble Arch. Mr. Speight's original design, although it left no use for the Marble Arch, really had a certain dignity. He showed a semi-circular route right round it. But then it was supposed that it was not the best route for traffic; so now we had the best route for traffic, which had no relation to the Arch whatever, which came in a sort of accidental line behind it, and the Arch was left standing central to nothing, not only with no use in itself, but without the appearance of architectural use. And in the case of a triumphal arch like that, he had sometimes thought, in regard to the Place de l'Étoile, was it quite the correct thing to put up an immense arch which suggested the idea of a gateway, and to use it solely as a thing to drive round? It always seemed to him that in the Place de l'Étoile the traffic ought to be going through that arch instead of driving round it. With regard to the irregularity of these *places*, we find a *place* or a market-place in an old town which had irregularity of line and looked very well, but he did not think that was an excuse for deliberately doing it. In planning a square in a great town he was quite in favour of symmetry. He did not quite believe that the eye did not see when the two sides were not parallel. He should prefer to see them symmetrically treated. The only other point that he heard with a little dread and terror was the suggestion that we should some day see Hyde Park taken up by aviation. He was afraid that would be an end to the amenities of Hyde Park. He wished to join very heartily in appreciation of the interesting and valuable paper they had heard, and not only to join in the vote of thanks to Mr. Triggs for having written it, but they owed also, he thought, a supplementary vote of thanks to the Secretary for reading it.

Mr. FRANCIS HOOPER [*F.*] said he should like to be allowed to follow Mr. Statham, the respected successor of the donor of the Bursary, to whom, indirectly, they owed the paper that had interested them so much. He himself had had the privilege of holding the Godwin Bursary, and could appreciate the generosity of its founder. He was particularly interested that evening to find that the city to which he had devoted his interest, Paris, had been so prominently laid before them. He desired to express a hope that one of the plans shown upon the screen, that of the Piazza of St. Mark in Venice, might be amongst those to be illustrated in the JOURNAL. Mr. Statham had alluded to the frequent difficulty of building sites which resulted from a regular form, such as a circus. The difficulty in planning any new arrangement of streets and schemes on an absolutely rectangular principle was that they resulted in an old city in a great many irregular sites, and this plan, to which he alluded, of the Piazza of St. Mark in Venice showed that a most dignified effect could be obtained without rectangular enclosures. Also it was interesting to see that the courtyard of the Doge's palace, which delighted every visitor, was not enclosed by rectangular lines. If this matter could be always borne in mind by those in authority, or by those who were studying any street improvement, he believed many difficulties might be overcome. Their memories carried them back to the time when Mr. Westgarth offered a prize to the Society of Arts for a scheme for remodelling London, and their friend Mr. Woodward was amongst the successful competitors. Unfortunately the death of Mr. Westgarth put an end to the career of one who was deeply in earnest with regard to the study and development of London improvement. How much they lost they could hardly tell, for he had made up his mind obviously to educate the public and at the same time to educate architects by inviting them to give their attention to the problem of street improvement. The subject was also brought prominently not only before architects, but before the authorities of London, in the valuable paper by Mr. Paul Waterhouse. He felt that every time the subject was brought before the Institute they were doing something not only to educate the public, but primarily to educate themselves in the intricate problems of street alignment and the improvement of the facilities for traffic.

Mr. WM. WOODWARD [*F.*] said he was much obliged to Mr. Hooper for informing the Institute that he was the fortunate recipient of the liberality of Mr. William Westgarth. He would endorse all Mr. Hooper had said, for had Mr. Westgarth lived it was his intention, as he had heard time after time from his own lips, to devote a very large sum of money indeed to the furtherance of the beautification of London. He desired to add his meed of praise for the paper they had listened to. He quite expected, however, that in a paper on

town planning and on the disposition of streets in cities reference would be made to the last efforts in London to give us what we were entitled to receive. Reference had been made by Mr. Statham to the Marble Arch improvement. He (Mr. Woodward) had ventured in the public press, and ventured now in the presence of the author, Mr. Speaight, to whom they owed very many thanks for all that he had done, to say that the result of the Marble Arch improvement had been very unfortunate. He had been very glad to hear from Mr. Statham that Mr. Speaight's original design, had it not been tampered with, would have given them a much better result than was now before them. He had suggested to Mr. Speaight, and in the public press, that the Arch, being isolated and having no *raison d'être* whatever, could be made of some service if it were shifted back to the piers to which the large gates were hung, and form an entrance to the existing fine avenue. With regard to the greatest improvement London had had the opportunity of witnessing—viz. the memorial to Queen Victoria—here, in Pall Mall, was a magnificent avenue terminated, as probably it would be, by an equally magnificent monument to the Queen. The entrance to Charing Cross as now finished could be seen. He understood that the Government had determined that no more houses should be pulled down than they now saw to open up that grand curve of Sir Aston Webb's so that they might see from the Strand the beauty of the design. Even were those houses pulled down that improvement could not be considered complete unless Drummond's Bank were also pulled down and Whitehall widened at that end, as had so often been insisted upon by the Institute. A great blunder had been committed by placing heavy masonry over the three arches, not only spoiling the effect—and particularly so from the park—of the improvement, but depriving London of the opportunity from Charing Cross and its surroundings of looking through a fine vista right to the monument of Queen Victoria. It was a matter of everlasting regret. He did not think it was due to Sir Aston Webb entirely that that had been done, but, whether or not, that to his mind was another lost opportunity for public improvement in London. They were looking forward with great interest to Mr. Norman Shaw's design for Piccadilly Circus. What they knew of Mr. Norman Shaw would convince them that they would have something very fine with regard to that Circus. Mr. Shaw had given them—or would give them when the Quadrant was completed—an improvement even on Nash's Quadrant; that is to say, instead of leaving Air Street open and severing parts of the Quadrant, he would continue his architecture right round the Quadrant, and give to the whole a very fine architectural effect. With regard to the height of buildings as compared with the width of thoroughfares, it was well to bear in mind the width of two thoroughfares—Northumberland Avenue, which was 90 feet in width from building to building, and Portland Place, which was 120 feet in width from building to building. These two thoroughfares gave a very good idea of the effect of the height of buildings on the width of streets.

THE PRESIDENT said it was only fair to Sir Aston Webb to say that he had very ably treated the avenue referred to. His building was cleverly planned to cover the unsightly cant of the road that occurred at that point. If he had carried the avenue through, he would only have looked on the halves of two houses in Parliament Street; it would not have afforded a vista. That was why Sir Aston had blinded that end and had put his three radiating arches there. He quite agreed with Mr. Woodward's other remarks.

MR. F. W. SPEAIGHT said he was sure that those who were not members of this distinguished institution must have listened with delight to the most interesting Paper that they had just heard read. Mr. Triggs's book *Formal Gardens in England and Scotland* was the first of the few books he had purchased on architecture, and there was no book he looked at more frequently, and, through doing so, any elementary knowledge he had obtained on architectural planning and the balance of design he owed in the first place to its author. Looking round the room he could not help wondering how many gentlemen were present who ought to have really listened to this Paper; because he presumed most of those present were members of the architectural profession who entirely agreed with everything that had been said and everything that had been displayed. He would rather have seen the room full of members of Improvement Committees and members of Parliament, especially those who refused to grant money for public improvements; and he should have liked especially to have seen a few First Commissioners of Works. He hoped, however, that some means might be found for circulating this Paper among those who would benefit by reading it. One impression he had gained in looking at the beautiful views put before them was how peaceful those *places* were, and how different they would appear if they were in London; for it seemed to him that the few public places they had were entirely spoilt by the fidgeting and annoying things that were allowed to appear in them. Other societies were in existence for the prevention of cruelty and nuisance. He should very much like to see a Society for the Prevention of Cruelty to Public Places and Public Buildings. It was impossible to look anywhere without seeing the most awful eyesores; and it was frequently left to a private individual—and he was afraid very often, much to his objection, to himself—to protest in the public press against these eyesores. The question of Sir Aston Webb's monumental work at the Mall had been referred

to, and Mr. Woodward had criticised the design of the arch. Mr. Woodward, he was afraid, must hold shares in Bovril, because if that arch was taken away the principal thing that would be seen, as they came from the Mall, would be "Bovril" flashing in that dreadful electric-light advertisement in front of the building that faced the arch. Here was an improvement he supposed that had cost in round figures a million, more or less, and the chief thing seen as one came through the centre arch was that dreadful word "Bovril." There was no other city in the world that would allow such a thing as this. Again, at the Royal Exchange, in the centre of the City, there were a couple of tubs belonging to some Public Gardens Association. These two leaky tubs with half-dead plants spoiled the whole effect of the façade of the Royal Exchange. It was a small matter, but to anybody with an artist's eye, or an eye that, like his, wished to be artistic, it was most annoying; and instead of the tubs being an advertisement for the Public Gardens Association they were just the reverse. Trafalgar Square a little while ago had a Tube entrance erected there. One morning he was passing and he saw a huge electric light notice put above it showing plans of "How to get about London." Why should it have been left, as it was in that case, to a private individual to write to the *Times* to protest against it and to draw attention to the fact that when permission was given to form an entrance there a special clause in the Act forbade any advertisement to appear above the railings? Take, again, Parliament Square that used to be disfigured with a number of untidy flower beds containing half-perished red geraniums. It was Canon Henson, he believed, who wrote to the papers saying that it was the vapours of the motor omnibuses that caused the geraniums to wither, and that the vapour was having also an injurious effect upon the Abbey. He read this astonishing statement coming up from the country one morning, and immediately he jumped into a cab and drove to one of the gardeners on the spot and asked about it. He found, however, that the fading of the flowers was due to the vapours from the wood paving. Again it was left to a private citizen to write to the papers protesting against the untidy condition of Parliament Square. Everyone would rejoice to see how immensely that had been remedied by the bays which had now been planted round it. At the cost of a few pounds and a little thought from the First Commissioner of Works the whole effect had been improved. What other city in the world would allow those two most awkward lamps at either side of the steps in front of St. Paul's Cathedral? They look like two storks roosting. He should like, in conclusion, to thank the members of the architectural profession, and also the gentlemen who were associated with the architectural press, for the most—he could only term it—brotherly support they had extended on many occasions to an outsider who attempted to take an interest in the work in which they were professionally engaged. There was sometimes a feeling that the outsider was looked upon as an intruder, but he must say that he had received most kindly support and encouragement from many architects, and he hoped this encouragement which had been so generously extended to himself would encourage other private citizens in taking an interest in public improvements.

MR. RAYMOND UNWIN said he wished to add his thanks to Mr. Triggs not only for what he had given them in his admirable and comprehensive Paper, but also for the many useful examples of *places* and examples of town planning from different cities on the Continent to be found in his book. He was pleased to see in Mr. Triggs's Paper—what he would like to amplify a little—viz., the view that it was important to take centres for towns. He was rather inclined to dissent from the seconder, Mr. Waterhouse, who thought it was not possible to have a centre to a very big city. It was not possible, he thought, to collect everything into one centre in a big city, but it was possible to have a centre in scale with the city and supplementary centres as well; if they were to give a sense of scale to their plans of towns it was largely by the use of *places* and centres, which would often be formed not only of individual *places* but of groups of *places*, which were, he thought, among the most charming features of many Continental towns. At Nancy, for instance, they would not find one *place*, but a group of *places* leading from one to another. At Salzburg and in many other towns they had the charm of passing out of one *place* into another, and then even into a group of *places*. In that way, without necessarily attempting an enormous *place* in scale with a town like London, they might have quite definitely centres composed of a group of *places* which would be large enough to stand out as it were in scale. This importance of scale between the different parts in making the whole into an interesting design was one which should be borne in mind not only in planning the centre of a town but in the planning of suburbs. If we made more use of the *place* and centre in planning our suburbs, even using some central feature for such small areas as building estates, we should get much more interest into our designs and more sense of scale between the different parts. We should find there probably much more scope for actual work than in large monumental places, for which, as had been repeatedly mentioned, opportunities in England occurred only occasionally. Mr. Triggs mentioned one or two *places*, particularly the Place de la République in Paris, as good examples of the treatment of multiple junctions as being better than a round *place*. He did not think the reasoning very convincing. If there was any virtue in a round *place* it arose from the fact that all the traffic was kept moving in one direction,

whereas, as shown in the illustration of an open place as suggested by Mr. Triggs, it must either be cut in the middle and the gyration be upset, or, as in the Place de la République, a very serious détour must be made by traffic from the sides. A good deal could be said, if there was to be a gyratory place, for having one of a round character. Mr. Triggs's statement that the gyratory *place* was only useful when it was of immense size needed to be reconsidered, perhaps, unless there was an immense volume of traffic: a comparatively small area was sufficient for any ordinary traffic to give room for it to pass round and pass off in different directions. It was probably true, as had been often pointed out, that it was difficult to get a really satisfactory architectural effect in such places, but none the less he thought from the point of view of traffic, about which they perhaps took too much account, it was useful, and he was not sure that the round form was not the best for that particular system. With regard to railway stations, he thought the station at Hanover which was shown had the great disadvantage that as soon as a passenger stepped out of the station he was in the traffic and liable to be run over from one direction or the other. That was a very great disadvantage, and he was glad to see that it was avoided in Mr. Triggs's design for a station. People coming out of a bustling station wanted a little breathing space to find out in which direction they wanted to go before having to step on to a busy road with streams of trams rushing about. The Karlsplatz at Munich, of which Mr. Triggs showed a picture, afforded a good example of the proper place for cabs to stand. In the case of garden *places*, some of those shown seemed rather frittered away in pattern work which was lacking in breadth. One thing that struck him in seeing the garden *places* on the Continent was that those were most successful which were most broadly and simply treated. The garden *place* of the Palais Royal in Paris, for instance, was nicely and squarely treated, whereas in many places the whole space seemed to be frittered away by the geometrical patterns. What was really wanted was to give a breadth of foreground to buildings. Mr. Triggs divided *places* and classified them in various ways into business and ornamental *places*, but that classification might be somewhat further amplified. In England we had public meetings and demonstrations, and some *places* might serve for that purpose, and others might very suitably be rest *places*, quiet *places*, where broad expanses of grass and foliage would be useful.

MR. TRIGGS, to whom an advance proof of the foregoing report had been sent, replies:—

Among the points referred to in the discussion was the improvement to Hyde Park Corner made by the Metropolitan Board of Works in 1883. In venturing to suggest that an architectural place would have been an ideal treatment for such a position, I had in my mind a semicircular place 450 feet across, with Hyde Park arch as a centre, flanked by Apsley House and a similar building on the other side. This would involve the rebuilding of St. George's Hospital (a contingency that has been mooted more than once), the placing of the Wellington arch on the circumference of the semicircle, and perhaps the construction of a similar arch leading to Grosvenor Crescent. Grosvenor Place could have been arranged to enter exactly opposite the Hyde Park arch. Such an arrangement would have prevented the confusion of traffic lines at the junction of Hamilton Place with Piccadilly. Magnificent building sites would have been created on the east and north sides of the place. The value of these would have gone far towards the compensating of St. George's Hospital, and Hyde Park Corner would have rivalled the superb Pariser Platz at the end of Unter den Linden. It is instructive to read in the "History of London Street Improvements," by Mr. P. J. Edwards, how much more eager the authorities appear to have been to apportion the payments to be made by the different Boards than to give London a dignified entrance to Hyde Park.

As Mr. Waterhouse points out, it has to be remembered that the needs of large cities are very different from those of small provincial cities. The mistake that we have so often made in this country is that we have failed to realise how quickly a small town can grow into a large city. I, too, am inclined to dissent from Mr. Waterhouse, and fail to see why in large cities a civic centre is undesirable. Such a centre might have been created at South Kensington with great advantage to that series of magnificent buildings. Cardiff, with its Law Courts, City Hall, Museum, and University, has led the way among provincial cities in planning a fine civic group; and in the United States the creation of large civic centres has been a marked feature of several fine city plans in recent years.

I made no allusion in my Paper to the grouping of places because I feel that this part of the subject had been fully dealt with by Mr. Simpson, but I realise with Mr. Unwin that such groups are among the most charming features of many Continental towns. As to the shape of traffic places, the oval and elongated forms, though perhaps not so striking on paper, seem to me to be more effective in distributing traffic. It is difficult to form a comparison in London, but in Paris I think that anyone who will spend an hour at the Place de l'Étoile on a busy Sunday afternoon will find that as regards facility of movement it compares badly with the Place de la République.

My thanks are due to Mr. Batsford for the loan of many interesting engravings of London Squares, and to Dr. Brinckmann for the plans of two forecourt places in Rome.

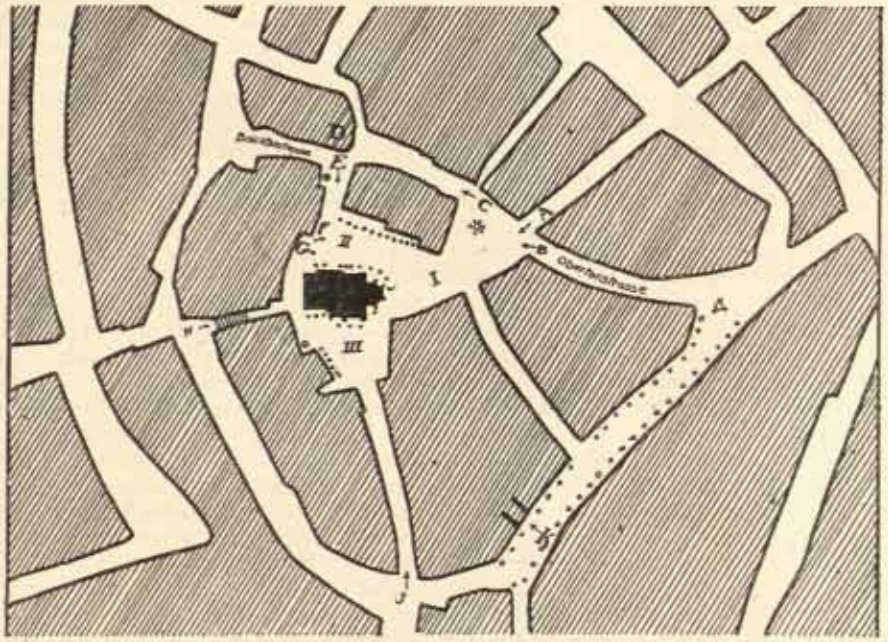
TOWN PLANNING.

PAPERS COLLECTED BY THE R.I.B.A. TOWN PLANNING COMMITTEE.

V.—BUTTSTEDT.*

Communicated by RAYMOND UNWIN.

Provincial towns of medium size, boasting some traditional merit and characterised by some regular architectural development generally, make the same impression on the minds of all strangers visiting them for the first time. Surrounding an otherwise good lay-out, one finds an untidy area marking the growth of the last decades. He who has visited many such towns will invariably note this characteristic. But, after passing through the outer zone of nineteenth-century ugliness, the beauty of the old city is still to be seen. A fine example of this is the little town of Buttstedt, in Sachsen-Weimar, with a few thousand inhabitants, whose only claim to importance nowadays lies in its small cattle market, once so prosperous, and which brought fame to the then fortified town.



PLAN OF BUTTSTEDT.

Of this bygone though modest splendour there yet remain many a burgher's house, the town-hall, and notably the church. Walking from the railway station to the town, one must needs pass along a straight and inexpressibly dreary street, which certainly gives rise to any but pleasant anticipations, running aimlessly through the town and entering the market-place at A, on the plan, with no consideration whatever for perspective. The market-place, though lacking any prominent feature, is perfect in its general effect. Standing in the square formed on the left side by a row of simple dwelling-houses, on the right side by the long-stretching front of the town-hall with the fountain before it, one sees the choir of St. Michael's Church, which blends with beautiful effect, its romantic but majestic tower giving a sense of vertical development (Illus. A).

The joy of studying town plans is one which never grows old to those interested in the art of designing towns and cities. One feels more and more how well the builders of former times were able to unite utility and beauty without giving undue preference to either. The task is so simple, and yet, as it seems after the experiences of later times, so difficult to accomplish. We are apt to forget that the natural circumstances must be taken as fundamental, and to overlook nature's demands, fulfilling them in an unnatural way or ruthlessly neglecting them.

Looking at the present plan of Buttstedt, one is pleasantly surprised by the beauty of its lines and general lay-out. The whole is undoubtedly the product of thoughtful consideration. The graceful lines of the streets lead in seemingly unintentional yet well-calculated curves from the outer zone to the market-place. Nowhere, except in the "New Street"—leading outward from A on plan—does one find any severity or unnatural constraint. In this we see the difference between the old town plans and the lay-out of a time which is not yet quite over, which has failed, not having fully grasped the meaning of the principle of "practical utility." So many valuable ideals have been destroyed by the

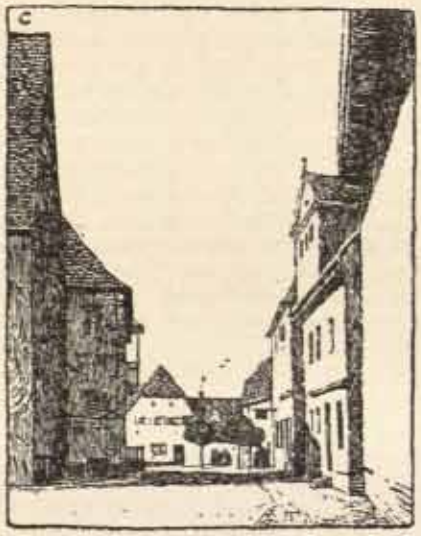
* A translation of the article "Buttstedt: eine Städtebauliche Studie von Richard Woernle und Robert Schwerdtfeger," from the December number 1908 of *Der Städtebau*, in which number further illustrations of this town not reproduced herewith will be found.

too generous or thoughtless use of straight lines to facilitate traffic.

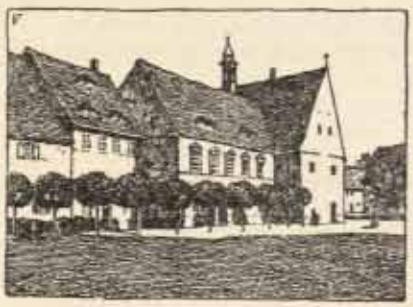
To understand the lines of the plan it is of course necessary to know the nature of the site, and one can scarcely misunderstand the meaning of the different curves of the streets. Buttstedt is built on a flat hill, which falls off rather steeply in a semi-circle on the west side, while on the other sides it slopes gently down towards the surrounding plain. At the top of the hill stands the market-place with

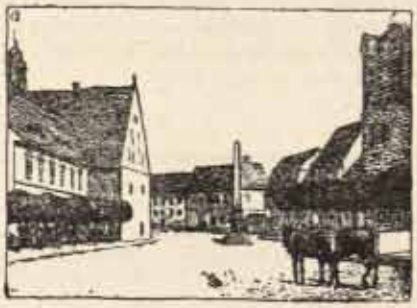
















the town-hall and the church, which always keeps its dominant position, and the beautiful effect of which is not spoiled by any false balance in the grouping. The fundamental law of all architectural grouping of buildings, too often forgotten in later times, was formerly very strictly adhered to. Side by side with an evenness and balance in the distribution of the buildings, streets, and squares, there is a gradual development towards the centre to which everything spontaneously subordinates itself.

In Buttstedt, St. Michael's Church forms such a centre. It is a very beautiful building, and its characteristic tower is one of the best in Thuringen. It dates from the beginning of the 16th century, and is probably of Gothic origin. (For details of the church and town-hall see Lehfeld's "Bau- und Kunstdenkmäler Thüringens.") It is marvellously well situated in the centre of the market-place, and yet its characteristic beauty does not overshadow the less striking town-hall, and closes the different street views in a very pleasant manner. Its western front is built on the very edge of the steep hill, from the foot of which its appearance makes a magnificent impression.

By means of the church and the town-hall the triangular market-place is divided into three squares, which are well proportioned in regard to the groups of buildings surrounding them.

Square I., with the church on the west side, forms a deep *place* in the sense of Camillo Sitte.

Square II., in relation to the town-hall and the north side of the church nave, forms a broad *place*.

Square III. is also a broad *place* very cleverly made by a cut in the group of buildings to the south.

If we take the town-hall into consideration we can also call Square I. a broad *place*, and in this respect it is especially well planned; the quite simple, broad, eastern front of the town-hall, with a charming fountain surrounded by acacia trees, is most pleasing. By this division of the very large market-place into three squares the traffic is divided successfully, and at the same time the *place* presents a beautifully closed appearance. Nowhere, except where the New Street opens into the market-place, can you see any hole or gap in the sides of the square, although a great number of streets lead into it.

Buttstedt is an excellent example of Camillo Sitte's theory that broad *places* are only good when they are enclosed and dominated by buildings of the proper heights.

A good view of the town-hall and the fountain is obtained from the point B, and looking past the town-hall we see the continuation of the Obertorstrasse (Illus. C), ending in the corner house of the Brücktorstrasse, marked D on plan. We notice here how the Brücktorstrasse has been shifted from the line of the Obertorstrasse by a quite simple but cunningly arranged device. From another point we see the fountain surrounded by fairly young acacia trees, which must have been recently planted.

In Squares II. and III. the line of the trees follows that of the buildings, and encloses them in a green frame without really hiding them—this kind of acacia tree does not grow large (Illus. F and G). From another standpoint one sees the beautiful side of the town-hall, with a row of trees forming an excellent continuation of the western gable of the building. Again, at the projecting corner of the Brücktorstrasse one sees the tower rising above the long roof of the church (Illus. E). From other standpoints one gets a view, down the continuation of the Obertorstrasse, of one of the finest private houses of the town, of the convex curve of this street formed by the side of the town-hall, and also of a fine bow window on this building. Passing along the Brücktorstrasse we come to the Klefer Platz, where once again one catches a glimpse of the church tower between the houses.

The Brauhausstrasse—(from H–J on plan)—follows mainly the line of the old town-wall, which

still exists in part. From this street and its continuation the Topfmarkt (K on plan), the streets lead to the market-place, and at the end of each one sees either the church or the town-hall, and between the houses there are some more openings left, through which one sees each time a new and beautiful view of the church. From yet other points one sees the same building from the Kirchstrasse and from the Topfmarkt (Illus. J and K), and the town-hall is visible from another. We notice the noble lines of the Marktstrasse with the barn without windows, also the Obertorstrasse with its view of the town-hall and fountain in front; the Obertorstrasse looking from the town-hall showing the graceful curve of the street, the group of very old houses on the Topfmarkt closing the street perspective, the view from the little Sammelgasse of the town-hall with the church tower appearing above it, and the old gate forming a pleasant ending to the street. Even better than by examining the plan, the clear, natural, and unpretentious beauty of the town can be appreciated by looking down from the church tower over the roofs of the houses.

The cemetery is outside the present plan; in former times it adjoined a small chapel, which has now disappeared. The cemetery is not now in use, and is deserted. Its plan is very pleasing, showing sympathetic treatment, particularly of the arcade on the inside, right and left of the entrance. Many of the tombstones were designed by native artisans.

The details of houses and stucco-work in the rooms are signs of a culture which has fallen asleep and has not yet been re-awakened. When shall our work, which has already achieved some measure of success, bring life to these little places again?

It will happen, because we are going gradually forward. But when?

VI.—THE MASSACHUSETTS METROPOLITAN IMPROVEMENTS COMMISSION.

The Institute has received the Report of the Massachusetts Metropolitan Improvements Commission (Boston). The members of this Commission were Messrs. Benjamin N. Johnson, *Chairman*, Henry B. Day, Desmond Fitzgerald, Thomas J. Gargan (since deceased), Robert S. Peabody, and Sylvester Baxter, *Secretary*.

The R.I.B.A. Town Planning Committee will deal with this most valuable report in a future issue of the JOURNAL; meanwhile it is considered desirable to reprint the Act of Legislature appointing the Commission, together with some extracts from the introduction to the Report, as being of special and immediate interest at the present moment.

ACT OF LEGISLATURE.

"RESOLVED,—That the Governor, by and with the advice and consent of the Council, shall appoint three persons, and the Mayor of the City of Boston shall appoint two persons, who shall together constitute a Commission of five for the purposes hereinafter named. The Chairman of said Commission shall be designated by the Governor. The said appointees shall serve without compensation, and shall be persons of recognised qualifications and large experience in respect to one or more of the following subjects or professions, namely: finance, commerce, industry, transportation, real estate, architecture, engineering, civic administration, and law. Said Commission shall investigate and report as to the advisability of any public works in the metropolitan district which in its opinion will tend to the convenience of the people, the development of local business, the beautifying of the district, or the improvement of the same as a place of residence. It shall consider the establishment of a systematic method of internal communication by highways, the control or direction of traffic and transportation, and the location of such docks and terminals as the interests of the district may demand. It shall recommend the method of executing and paying for such improvements as it may suggest, and shall make such maps, plans, and estimates of cost as may be needed for its investigation, for the proper presentation of its conclusions, and may employ such assistants therefor as it may deem necessary. The Commission may expend such sums of money, not exceeding twenty-five thousand dollars, for clerical, expert, and other assistance, and for other incidental expenses, as it deems necessary. The Commission shall make its final Report to the Governor and to the Mayor of Boston on or before the first day of December, nineteen hundred and eight, and its powers and duties shall then terminate. The Governor shall transmit the report to the General Court of the year nineteen hundred and nine. The expenses incurred under the provision of this Act shall be assessed upon the metropolitan parks district.

"Approved 15th June 1907."

EXTRACTS FROM THE INTRODUCTION TO THE REPORT OF THE COMMISSION.

"Soon after its appointment the Commission selected Mr. Sylvester Baxter as its Secretary, and proceeded to give very general notice of its organisation and readiness to receive information or suggestions from any citizen who could assist the Commission in arriving at sound conclusions. Written information and requests to that effect were especially sent to the mayors of cities and the select men of towns, as well as to all known boards of trade, improvement societies, and other similar associations within the metropolitan district. Several hundred written requests for suggestions and assistance were likewise sent to those citizens of the Commonwealth who were known to have made a study of or to have shown interest in any of the lines of inquiry entrusted to the Commission. All these notices and requests were accompanied by a printed copy of the resolve establishing the Commission, thus disclosing fully the nature and scope of the subjects to be considered.

"Since its appointment the Commission has held regular meetings, usually twice in every week. It also gave several public hearings, which were widely advertised and afforded every citizen an opportunity to be heard on any question which he deemed to affect the public interest. In pursuing its investigations the members of the Commission from time to time personally visited many points of interest in the district, and thus made direct study of the plans of improvement that

were brought to their attention. In the same way they inspected the railroad terminals in Boston, both for freight and passengers, as well as the water terminals, unoccupied water frontage, sites for docks and industrial development, and other features of the harbour of the district.

"The scope of investigation entrusted to the discretion of the Commission is a very broad one; indeed, it is almost as comprehensive as the whole question of the public welfare and progress of the metropolitan district. This surely includes the interest of the entire Commonwealth. For while the Legislature has from time to time set apart certain cities and towns as constituting, with Boston, a metropolitan district, for the purpose of establishing an adequate system of parks, sewers or water supply, such legislation has never in any degree implied a doubt that the interests of every portion of Massachusetts are inseparably involved in the interests and welfare of every other portion. Such tentative divisions into metropolitan districts have been principally for the purpose of securing unity of administration in these important branches of public works. The only practical limitation of inquiry to be found in the resolve establishing the Commission is in the definition to be given to the term 'public works,' and this, upon a fair interpretation of so comprehensive a resolve, would probably include almost any public undertaking.

"The range of permissive investigation thus suggested presents a life work for any man or body of men who should undertake to cover it. It was therefore manifest to the Commission from the beginning that only a few selected subjects could be adequately studied, and that even the study of these must, to a considerable degree, be preliminary rather than final. The Commission nevertheless imposed no limitation or restriction upon the subjects which any citizen desired to discuss before it, and many suggestions were made and theories proposed with reference to which it has proved to be impossible to reach a definite conclusion. In this report the Commission deals only with those matters which it regards as of most immediate concern to the public.

"An analysis of the resolve providing for the appointment of the Commission discloses at once a clear distinction made therein by the Legislature between those 'public works' generally which, in the opinion of the Commission, will tend to the betterment of the metropolitan district in any way, and certain specific subjects which the resolve makes it mandatory upon the Commission to consider. The subjects thus definitely assigned for study and investigation were 'the establishment of a systematic method of internal communication by highways, the control or direction of traffic and transportation, and the location of such docks and terminals as the interests of the district may demand.' It is obvious that these matters, thus set apart from all others for special examination, are, in their proper relations, but different phases of the one great question of transportation. Docks and terminals are necessary and component parts of any modern system of railroad or water transportation. The securing of a better system of internal communication by highways between the various portions of the metropolitan district is but another branch of the same comprehensive subject. Highway movement is essentially one of traffic and transportation, and it is the highways that supply the principal routes for street-railway and rapid-transit lines.

"The year 1907 was peculiarly a period of awakening, of self-criticism, of anxious questioning whether all was indeed well with the State and metropolis, and whether sufficient effort was being made to encourage and promote their future and industrial progress. In that one year at least twelve representative organisations of Boston participated in active measures of inquiry whether Boston was in truth living up to its present opportunities, and doing what was necessary to meet the demands of the future. These organisations were the Boston Chamber of Commerce, Associated Board of Trade of Boston, Boston Merchants' Association, Boston Real Estate Exchange, Boston Clearing House Association, Boston Central Labour Union, Citizens' Association of Boston, Boston Society of Architects, Boston Society of Civil Engineers, Boston Board of Underwriters, Metropolitan Improvement League, Boston Stock Exchange, and Master Builders' Association. It would be difficult in any city to marshal a like number of organisations with a membership so generally made up of representative men. Upon the action taken by any of these societies there rested not the remotest shadow of self-interest; what they did was prompted from beginning to end by a lofty and disinterested public spirit.

"In addition to these many voluntary lines of inquiry as to the condition of the commerce and industries of Massachusetts, and the wiser lines on which to plan and provide for their future development, there were six separate instances of public action taken for the forwarding of these same self-searching inquiries as to what might be the deficiencies, the lack of enterprise, the point of failure, and the range of opportunity of the Commonwealth of the metropolis. These six public measures were as follows:—28th March 1907 the Legislature ordered the Boston Transit Commission to investigate the congestion and delay caused by teaming traffic and the movement of freight in Boston, and to report its recommendations; 28th May 1907 the Board of Harbour and Land Commissioners was directed by the Legislature to investigate and report as to the advisability of constructing and maintaining a system of metropolitan docks in the city of Boston, to be owned and controlled either by the Commonwealth or by the city; 7th June 1907 the Legislature gave to the Finance Commission, appointed by the Mayor of Boston as authorised by the city council to consider the financial condition of the city, the amplest power to summon witnesses and compel the production of books and papers bearing on that line of inquiry; 10th June 1907 the Legislature authorised a Commission on Commerce and Industry to investigate the present condition and future possibilities of the industries of this Commonwealth, the present condition and future possibilities of transportation, of manufactures and of industries, and to consider what might be done by legislation, by executive action, or by other means for the exploitation and development of the industries of the Commonwealth; 15th June 1907 the Legislature provided for the appointment of this Commission. Besides these five measures adopted by the Legislature, the Mayor of Boston, acting in pursuance of an order of the City Council, appointed a Commission to consider the sufficiency of, and possible improvements in, the docks and water terminals of Boston Harbour."

JOHN W. SIMPSON, H. V. LANCHESTER, *Hon. Secretaries, Town Planning Committee.*

PLAN FOR THE PRESERVATION OF WHITGIFT HOSPITAL.

The Committee for the Preservation of Whitgift Hospital have communicated to the Institute the plan they are putting forward as an alternative to the scheme proposed by the Croydon County Council for the widening of the principal thoroughfare of Croydon. As will be seen by the plans here reproduced, the Committee's object is to preserve Whitgift Hospital from the destruction which is to result if the proposals of the Croydon authorities prevail and their scheme receives Parliamentary sanction. The Preservation Committee claim that their plan gives all the widening of the road required at this point, and that it would be in every way as effective and not more costly in the end than the Council's plan. The Committee's case for the adoption of their alternative scheme is set out in a statement the material points of which are as follows :—

At various times during the past twenty-five years it has been hinted that the Hospital must be removed, but it was not until the year 1896 that any strong effort to effect the so-called "improvement" was made. It soon became evident that public opinion would not sanction the demolition. In eloquent language the then Primate, Archbishop Benson, reminded Croydonians of their duty, comparing the Hospital to the thatched cottage of Romulus, which for centuries was religiously preserved among the stately buildings of ancient Rome. What Romulus was to Rome, Whitgift was in many respects to Croydon ; and his Hospital was as worthy of retention as the thatched cottage of the great Roman.

In the year 1904 another attempt to rob the centre of Croydon of its chief architectural ornament was made. The Streets Improvement Committee submitted a plan of street widening which involved the demolition of the Hospital; but again a powerful opposition appeared, and the matter was deferred.

So far it has been sufficient merely to defeat the destructive policy. The increase of traffic in the main street, however, owing in a large measure to the advent of motor vehicles, has made a widening scheme compulsory.

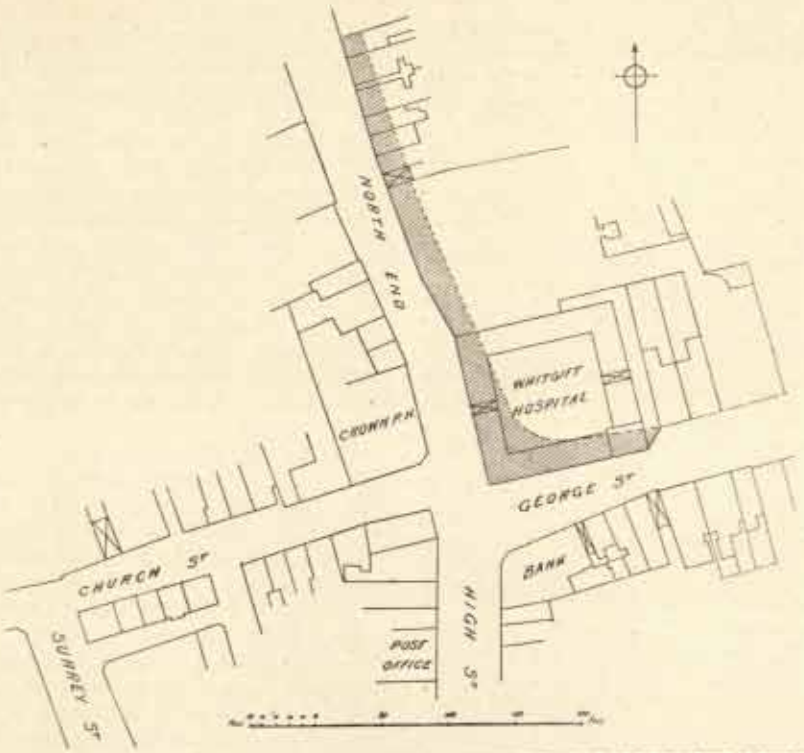
Unfortunately the Streets Improvement Committee have adhered to the old plan which involves the destruction of the Hospital. The Preservation Committee's alternative plan was placed before them, but beyond getting out some conjectural figures, which put their own plan in an unduly favourable light from a financial point of view, it appears to have received scant consideration.

Before considering the rival plans the action of the Council a few years ago regarding the frontages on the north side of George Street may be recalled. At that time the old school-house, a building contemporary with the Hospital, and used in later years as an annexe of the Whitgift Grammar School, together with a modern addition to the Hospital, and two residences occupied by the masters of the Grammar School, stood on that frontage. The Council decided when these buildings were demolished to create a new line of frontage further back than the line of the Whitgift Hospital. It has been suggested that this has made the demolition of the Hospital inevitable, but the result has been to bless instead of to curse ; the Chapel of the Hospital has been brought into prominence, and when, if the alternative scheme is carried out, a distant view of the Parish Church Tower is obtained, the vista from George Street, with the Chapel in the foreground, may help to restore to Croydon its former title to be considered a picturesque town.

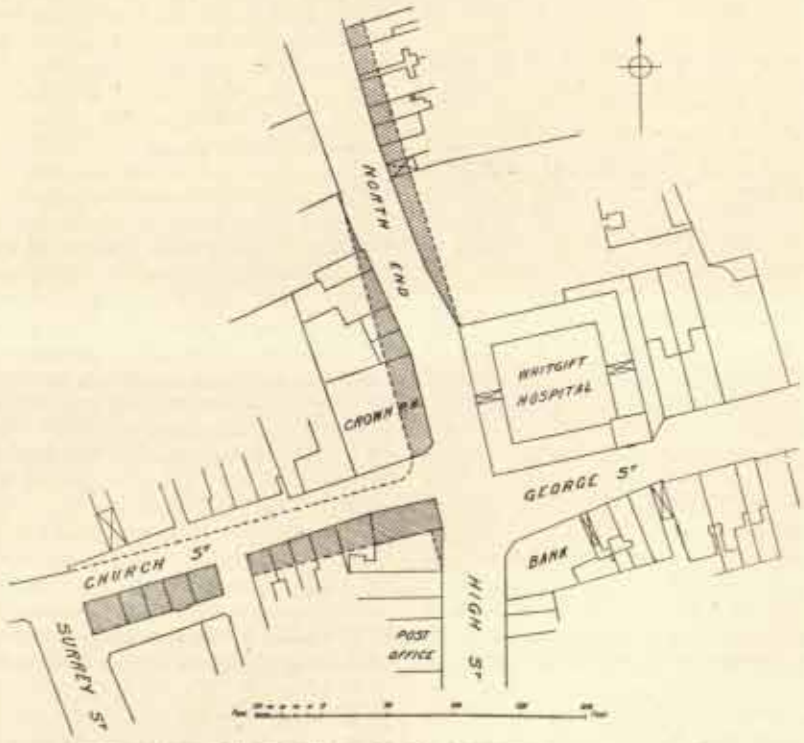
The scheme favoured by the majority of the Council makes a great point of the necessity of widening George Street, and its advocates are loud in their condemnation of the "danger" of the Whitgift corner, while some have gone so far as to describe it as a "death trap." Such assertions should not be made to support a scheme involving a very large expenditure without proofs being furnished. If the corner is really as dangerous as is asserted there would certainly be a dismal record of accidents, but most, if not all, of the accidents that have occurred in the proximity of the Hospital have happened either at the Bank corner or at the top of Crown Hill. The Whitgift corner instead of being dangerous is exactly the reverse, because no motorist or driver attempts to round it except in a cautious manner. The Bank corner, on the other hand, being more "inviting," is a far more likely place for accidents. The most that the would-be destroyers of the Whitgift Hospital can urge is that the corner is awkward, but this awkwardness could be removed by the widening of North End, as the footpath on that frontage of the Almshouses would then be at least double its present width, completely doing away with any inconvenience which may at present exist.

The Whitgift corner is a right angle, corresponding with the majority of corners even in the present streets of London ; it cannot, therefore, of itself be an element of danger. George Street, at its junction with North End and High Street, is about 60 feet in width, and, although it narrows up considerably at the Whitgift Chapel, that is too remote to affect the corner.

The inconvenience which exists will disappear if North End is widened on the west side, just as the traffic from Bond Street is easily regulated by passing into a wide thoroughfare like Piccadilly. Further, the Preservation scheme provides that, in addition to widening Crown Hill, that street should be more in a line with George Street, thereby doing away with the awkward turn which vehicles have to make in passing from one thoroughfare to another.



CROYDON COUNTY COUNCIL'S SCHEME FOR THE WIDENING OF NORTH END AND GEORGE STREET, CROYDON, INVOLVING THE DEMOLITION OF WHITGIFT HOSPITAL.



ALTERNATIVE SCHEME BY THE COMMITTEE FOR THE PRESERVATION OF WHITGIFT HOSPITAL.

Another point the advocates of demolition urge with regard to George Street is that to widen it on the southern side would be very expensive; but is it necessary to widen it at all, at any rate at present? and, even when it is necessary, the building line on the southern side of George Street being at the narrowest part several feet in front of the Bank line, it would be comparatively easy at some future date by straightening this line to add considerably to the width of the street at this point. The narrowest portion commences at the Chapel of the Whitgift Hospital, where the street is about 31 feet wide, but it rapidly widens out. This short and comparatively narrow portion is never congested, and for a very obvious reason. The frontages in other portions of the street are almost entirely occupied by shops. In front of the shops throughout the day vehicles are often standing; the roadway, therefore, available for through traffic is narrower to that extent; but at the George Street frontage of the Hospital no vehicle ever stands, while on the opposite side of the street the businesses, mainly professional, seldom require any vehicle to be at their doors, consequently that portion is more free from obstructions than the other parts.

The alternative scheme, which the Council have rejected, deals with a thoroughfare which really requires relief and which must be dealt with in the course of a few years—viz. Crown Hill. The narrowest portion of this congested street is only about 25 feet in width. The carriage way at this point is only about 15 feet in width, and the junction with North End is only a little over 30 feet. An effective improvement of this street involves the setting back of the "Crown" Hotel and adjoining shops, thus carrying out the very necessary widening of North End without interfering with the Hospital. Surely an impartial observer viewing Crown Hill and George Street on a busy day must admit that a scheme which deals with the former is worthy of consideration. The property which would have to be acquired in that street is not of great value, and the goodwills of the various businesses would be obtainable at moderate prices. Further, the scheme which most effectively improves the main street is the one that deserves adoption, and a glance at the plan will plainly show that the alternative we are advocating to the Council's scheme by the demolition of the "Crown" and adjoining shops will *straighten* the street. The Council's scheme, on the other hand, accentuates the present bend. This of itself is a serious objection, quite apart from the question of the demolition of the Hospital.

There are, unfortunately, a number of people who cannot see any beauty in the architecture of the Hospital; there are, probably, many in Croydon who do not appreciate the oratorios of Handel or the paintings of Turner; to such the æsthetic side of the question can never appeal. On the other hand, many fail to appreciate the beauty of the building because of its uncongenial surroundings, just as a fine picture may be spoiled by being badly framed. To these a few words may be said. Under the alternative scheme, important frontages in the neighbourhood of the Hospital will be under the control of the Council. It will be easy to insist that the architecture of the new elevations shall be either in accord with or complementary to that of the Hospital. If such an improvement is carried out with the advice of men of taste and feeling, the centre of the town of Croydon may be made as beautiful architecturally as it will be convenient to business. The Council's scheme, from an architectural point of view, is simply deplorable; the three remaining corners, after the Hospital is demolished, would be all different; the Bank corner has a radius of about 25 feet, Briant's corner is a right angle, while the "Crown" corner is bevelled off. To these it is proposed to add a new corner with a radius of 40 feet; a state of things more incongruous or more offensive to good taste cannot be imagined.

The question of cost, although it should not be the dominant factor, is, of course, very important. The Borough Engineer estimates the difference between the two schemes at £60,000, but at the end of his report he adds the following:—"The above estimates are based on buying out the entire properties, including all business interests; but no doubt in many instances the Corporation will be able to acquire the portion only required for improvement purposes, saving business compensation, and consequently the net cost to the Council should work out much less than the estimates." Now this is the crux of the whole matter. The goodwills, which are included in the alternative scheme, and not in the Council's scheme, are put down at a very large sum. In every one, with one exception, of the premises in North End and High Street it is reasonable to anticipate that compensation for interruption to trade and damage to stock during rebuilding would be accepted, as each trader would eventually occupy new premises superior in every way to those he vacates. It is contrary to human nature to assume that the occupiers would be dissatisfied with such an arrangement, or would wish to place obstacles in the way of an improvement. If the Council scheme is carried out, Crown Hill will still remain to be dealt with under conditions far less favourable, so it is very probable that the town, besides losing its Hospital, would be ultimately committed to a much greater expenditure.

An opinion has been expressed that the awkward gradient of Crown Hill would prove an insurmountable obstacle to the proposed improvement of that street. This is far from being the case; in fact the gradient could be considerably eased by the exercise of first-class engineering skill.

REVIEWS.

WESTMINSTER ABBEY.

Westminster Abbey. By Francis Bond, M.A. Oxon., 8o. Oxford, 1909. Price 10s. net. [Henry Frowde, Oxford University Press.]

Mr. Bond's book is a most excellent and interesting survey of the fabric and history of Westminster Abbey and the literature concerned with it. The general account of it as a Royal Church, a Monks' Church, a Pilgrims' and People's Church, cannot but enlarge the vision and stimulate the minds of readers, and thus greatly add to their understanding and enjoyment of the church. It well fulfils its purpose set out in the Preface, of being a comprehensive account of the Abbey on a reasonable scale, and it is illustrated with a profusion of entirely new photographs, together with other illustrations. Altogether there must be nearly as many figures as the 325 pages. Some of the photographs, specially taken, I suppose, by Mr. Bond himself, are entirely admirable as illustrations of architecture; such especially are the half-dozen perspective plans of vaults from page 89 onwards. Many of the smaller details have, I think, never been taken before. The writing is clear and interesting.

When a writer has got through some heavy work—and this is a piece of such work—he would like reasonable discussion of points raised; and yet there is the difficulty that discussion can generally only be of differences, or at least of that which does not seem to be proven. Reviews of books fail equally if they merely say ditto, or if, on the other hand, they magnify shallow objections and point out trivial errors. I therefore select two points of importance only, on one of which I think Mr. Bond may be wrong, while on the evidence before him he was free to put forward his view; and the other on which I think he is wholly wrong, although he had all the evidence which, so far as I know, is available.

The last question first. Mr. Bond decides that the design of Westminster must have been made by a French architect, and that English appreciation and appropriation of French ideas will not sufficiently explain the facts. Against this I would recapitulate some of the points of evidence which are well known, some of which are mentioned by Mr. Bond himself.

(1) Much of the plan is conditioned by the site and earlier buildings. A marked example of this is the intrusion of the cloister into the aisle of the south transept, and there were other fixed points to the East and the West.

(2) Where ideas have been taken from French sources they have been *re-adapted* in a large, free manner, as, for instance, in the throwing westward of the radiating chapels.

(3) Some parts even of the planning are typically English, notably the octagonal Chapter House and the long noble transepts.

(4) Then coming to the large architectural features, one by one. It seems to me that the ground arcade with its narrow bays (Mr. Bond himself says they were conditioned by the old Norman work, p. 82), its slender marble columns, so slender that I think they must have been conceived as of marble from the beginning; their moulded capitals (one of the points which would have been exaggeratedly indicated on a French design would have been *carved* capitals); its acute arches, so entirely different, not merely in feeling, but in the relation, of the heights of pier and arch from French examples; it seems to me that all this is English architecture designed for its place and purpose, not an interpretation of a Frenchman's drawings. The whole scheme of the Triforium stage is equally conditioned, and equally English. Mr. Bond himself says: "To the full development and to the disposition of its Triforium, more than to anything else, the Westminster design owes its supreme excellence." Yet, as Mr. Bond allows, it seems to be taken over, so far as the idea of a second story to the aisles goes, from the Confessor's Church. As to its bay design, it is surely distinctively English in the disposition of parts, and it seems to be in the line of development—Canterbury, Lincoln choir, St. Albans west end. Each of the two divisions is practically the same design as that of the windows over again, an arrangement that it would be hard to match in France. As to the upper story, the vaults are admittedly and characteristically English. I have not here spoken of mere mouldings and details, but of essential architecture and the design.

(5) What, then, *is* French? Certain large architectural factors, just such ones as might be set down in a mason's note-book; exactly such ones as we know were set down by V. de Honnecourt; such, for instance, as the specialised plan of radiating chapels, the window patterns of bar tracery, the large squared roses of the transepts, the portals of the north front, the developed flying buttresses. Having these in mind, Mr. Bond commits himself to the statement, "It is utterly impossible that Westminster can have been designed by anybody but one who was born and bred in the great French school of the Ile de France and Champagne, who had practised that school of design only, and who knew nothing else. No English architect, whether he went to France for a short or a long visit, could have designed Westminster." This is certainly a large and definite statement, and as an architect I can only energetically deny it. What we find, in fact, is the laying hold of French forms in the lump, and then re-adapting them. This is just what any trained architect is able to do in a short time. For instance, this is what Inigo Jones did in Italy in the seventeenth century. Save for travelling time I would venture to say that an expert master might have gained all he wanted for Westminster, at Amiens, Paris, and Rheims in a week. At

Westminster, says Mr. Bond, "One sees in essentials French Gothic, pure and simple, without the slightest tincture of contemporary design." It must be with other eyes than mine, and I cannot here but recall that when I once wrote that Westminster was influenced by the architecture of Rheims, I was told in print, by a friend, that there was no more resemblance than between Monmouth and Macedon.

(6) Mr. Bond seems to me to force the evidence when he says: "The central piers are slender, as in the Ile de France, so that no central tower was possible" (p. 106). Wren says, "It was plainly intended originally to have had a steeple, the beginnings of which appear at the corners of the cross, but left off before they rose so high as the ridge of the roof." In the accounts for the coronation of Edward I, boarding for "the new tower above the choir is mentioned." Henry VII calls the crossing "the lantern" in his will. This ample record evidence is borne out by the facts of the structure. The internal arches show that here no vault was ever contemplated at the general height of the other vaults. Outside, the squinch arches across the four angles are original inside the outer casings; their purpose was to let the parapet walks pass round a central tower. This tower, I suppose, was intended to be like the earlier part of Salisbury's central tower and the central tower of Beverley. "Wholly French," says Mr. Bond, "is the noble façade of the N. transept." Surely this is not so in the tympana of the doors (the present middle one does not represent the original form), and these should be the very centres of Frenchness; it is not so in the "Early English" windows of the second stage, nor in the four tall solid pinnacles, nor in the flying buttresses coming to the front. Notwithstanding the appropriation of ideas, I venture to say that this front would have looked more English if in France than, being in England, it looked French.

(7) Again Mr. Bond claims that the church, "being un-English and alien, was unpopular, and had little influence on English architecture . . . the only important exception is the north transept of Hereford." I can only repeat what I have already said in another place: "The work at Westminster exercised an enormous influence upon subsequent buildings in England. Its erection marks the close of the lancet and the opening of the geometrical period. Of direct imitations the most direct, as regards the plan at least, was Hayles Abbey. The radiating chapels at the not far distant Tewkesbury were probably in turn derived from Hayles. Tewkesbury also contains 'triangular' windows like those in the nave of Westminster, and similar windows, clearly derived from our abbey, are to be found in Lichfield and Hereford. The eastern wall of the great new work begun at St. Paul's in 1256 was modelled on the transept ends of Westminster. A similar extension at Lincoln, begun about the same time, shows in its south porch a study of the north portal in the Abbey [the whole inside and out is largely derived from Westminster]. At Salisbury the Cloister and Chapter House were evidently inspired by those at Westminster; even minute points may be traced to this source. Minor instances of affiliation are too numerous to mention; two of the most striking are parts of the W. front of Dunstable, and the well-known case of Stone Church, Kent."

(8) Absorption of ideas and borrowings from France are admitted; the infiltration was so constant that the supposition of sketch designs for once received from France does not meet the case. Willis thought that Lincoln was very French, and I may point out that five-part vaults like those of the aisles are found at Rouen; so are low arches beneath the parapets like those of Lincoln Chapter House. Must we suppose that Lincoln was designed at Rouen? The West portal of Salisbury is so like that of St. Nicaise at Rheims that I can hardly suppose it fortuitous (see fig. in V. le Duc). The noble nave of York (interior) has a curious resemblance to the choir of Clermont Ferrand. It is necessary to find a general formula for all these, not for one only.

(9) The idea of covering the arch spandrils with diapering, one of the big characteristics of Westminster, seems to be English. The ideal of having a church largely of polished marble was, I should say, present from the first conception of Westminster, and this tradition is taken over from Salisbury, Winchester Hall, and the Temple Church.

(10) Again, we have internal growth and modification as the work went on, which shows that there was no adherence to an authoritative design even during Henry III's life; such were the narrow blank arches added at the side of the windows on the exterior of the western limb, and the redesigning of the vault of the choir, and many minor changes, results of perfect freedom. The total "expression" of Westminster has nothing of the force and pride of French work; it is sweet, tender, and English.

(11) Finally, there is a logical dilemma. The octagonal Chapter House vaulted from a slender central column seems to have been invented and developed in England. Now what M. Paris calls "the incomparable Chapter House" of Westminster contains in its large four-light windows of tracery a borrowing from contemporary French work, more "up to date" than any other feature built up to this time (1245–50) in the church. The Jesse-tree sculpture of its west door seems to be borrowed directly from Amiens. Just this most English part then is also the most French.

(12) Another last point is that the borrowings for the greater part are of fashions thirty or twenty years old; the Chapter House windows and the much later transept roses are the only points abreast of the French movement.

Theoretically anything might be true; King Alfred might be a Danish changeling, Shakespeare might be a belated Italian humanist; on such lines of putting a case Westminster *might* have been designed in Paris by Pierre de Montereau. But Mr. Bond's hypothesis of a French architect does not explain the facts at Westminster as does the theory of the two Scotts that the architect was an Englishman who was acquainted with what had been done in France.

. . . . .

The other question which I will touch is that concerning the Confessor's Church. Mr. Bond agrees that it probably had a vaulted triforium; but, accepting also the view which has been held by everyone that Westminster had a pillared apse surrounded by an ambulatory, he claims that as this feature would have come *ultimately* from Tours, so the vaulted triforium might also have come from the same source, and he proceeds: "Hence it follows that whereas all the text-books tell us that our English Romanesque is derived from Normandy, there are in reality two separate sources, the second being the Confessor's Church at Westminster." He would thus make our whole architectural history turn on a derivation from Tours. I would just remark on this that we have no knowledge whatever as to the existence of a vaulted triforium at Tours. It is unlikely that even if there had been an ambulatory at Westminster it would have been derived *directly* from the original centre from whence the whole series may have radiated. The true content of the argument is only that several large features of the Confessor's Church are likely to have come from some one immediate source. That is, either from one of the places where there was a vaulted triforium, or one of the places where there was an ambulatory, if indeed Westminster had one.

I had never seen the stumps of the piers of the Confessor's Church until about two years ago, but subsequent examinations have convinced me that they were more probably parts of wall-piers once attached to a closed-in presbytery, rather than fragments of pillars which once divided it from an aisle. They consisted of pilaster strips with bold half rounds in front, and although in themselves they might have belonged to isolated piers like those at Winchester, it is almost impossible to imagine the chance which should have led to just these members surviving while the rest of the piers were entirely grubbed up. Moreover, they are found *attached* to a wall which has been assumed to be part of Henry III's foundations built up against the fragments, and this exactly alike on both sides of the presbytery.

Further, of the two piers on the N. side, being the first and second from the crossing, the second is different in having to the *west* an additional outer square member so that it projects forward about a foot in front of the other pier.

These facts can best be explained by supposing that the second pier represents the respond of an apse terminating at the second bay a closed presbytery. Mr. Bond will, I am sure, appreciate the force of the evidence as to wall-piers and the greater projection at the second bay if he will turn to the plan of Cerisy, and consider it with what he has said on this type—"this was the normal plan of eastern limb which the Norman builders brought over to England." The prototype of Cerisy was Jumièges. According to this reading the bays of the Confessor's Church would have been about 17 ft. 6 in. wide instead of 19 ft., and, a most important point, the site of the altar would not have been moved by Henry III, for the position of his altar came just on the chord of the apse now postulated. The old presbytery would then have been of the normal two-bayed type found in early Norman churches. Thus, too, the site of the old altar really conditioned the short presbytery of the present church, an extraordinary feature which has never been adequately explained. Finally, the plan so obtained coincides perfectly with that of Jumièges, a church which we know had an important vaulted triforium. An objection can be made regarding the position of the Lady Chapel of 1220, which has been assumed to have opened directly from the ambulatory of the Confessor's Church and extended as far as the apse of Henry VII's Chapel, where foundations of an apsed end were discovered in digging Dean Stanley's grave. Whatever be the weak link here I cannot think it probable that all these assumptions should be true. It is not likely that an apsidal-ended chapel of the type put forward, and over 100 feet long, would have been built in England in 1220. It is very doubtful whether a wooden roofed chapel such as that was would have an apse. During the work at the church this roof was removed and the chapel was vaulted; it may then have been lengthened, or it may very well have stood detached from the Confessor's Church like the chapel (of St. Piat?) to the east of Chartres Cathedral. If my present views are correct as to the Confessor's apse, the span of the church was considerably less than that of the present church, and the whole would have been smaller than I had supposed, although I had suggested reducing the older estimate.

The word *ambitus* in the written description of the church referred, I suppose, to the aisles E.W.N. and S.; in the Jumièges type they were continued even across the ends of the transepts. Beyond the detailed considerations just set out, it may be said that it is more likely that Edward the Confessor followed the fashions of Rouen, Jumièges, and Caen than the style of Tours. Two indications of style which we have in the form of the piers and the profile of the bases bear this out, for they are distinctively Norman; the base made only of two

hollows is found at St. Stephen's, Caen, and it is *the* base at Jumièges. The ambulatory plan did not reach Normandy till about 1070, and three or four important churches were built of this type in the next ten or twelve years. Irrespective of the supposed sporadic case at Westminster the plan would have reached England in due course about 1080. The development of English churches becomes regular if Westminster is to be given to the other older type, and it is a member of the series, Jumièges, Westminster, St. Stephen's Caen, Cerisy, Canterbury, and we can understand why Lincoln, Durham, and Peterborough might continue in the ancient ways. All the facts gathered up together show that Westminster was probably a copy of Jumièges.

W. R. LETHABY.

THE ITALIAN RENAISSANCE.

The Architecture of the Renaissance in Italy. By William J. Anderson. Fourth edition, revised and enlarged. 8o. *Lond.* 1909. *Price* 12*s.* 6*d. net.* [*B. T. Batsford, 94 High Holborn, W.C.*]

The pressure of modern life leaves but scant leisure for study except in branches immediately connected with actual professional needs. Even our favourite books stand unopened on the shelf. Like their bindings our recollection of their contents fades from year to year. Any circumstance then which tends to disturb our acquiescence in the habit of neglect, to direct our attention once more to the authors we have read with profit, which gives us an opportunity of reviving the enthusiasm of student days and testing the foundations of the faith laid in us at that impressionable age, should be hailed with gratitude.

Such a circumstance is the appearance of a new and enlarged edition of Anderson's *Italian Renaissance*. Pleasure in welcoming it is dimmed only by regret for a career so prematurely cut short when it gave promise of much good work in this and similar domains. The epithet "epoch-making" has become so hackneyed that it has lost much of its force, but it is not too much to say that it can be applied in fullest meaning to the first arrival on the scene of this work. That such a book was—and continues to be—much needed by architectural students of English speech the call for a fresh edition on an average every three years is a conclusive proof. They had previously to depend for information on the Italian Renaissance on the necessarily meagre sections devoted to the subject in general histories, or on expensive monographs which were but seldom accessible to them. Any tolerably compiled text-book, if freely illustrated, might under the circumstances have secured a large circulation. But Anderson gave us no mere compilation. There was nothing of the Dry-as-dust about him. He gave us a well-written exposition of what he conceived to be the most vital periods of the Renaissance of architecture in Italy; he presented it with judiciously chosen illustrations and in a style inspired by a stimulating and infectious enthusiasm. The book was of convenient size, moderate in price, and illustrated largely by photographs, which conveyed an entirely new impression of buildings known hitherto too often only through the medium of lifeless geometrical drawings.

The moment of its appearance was peculiarly happy. It exactly met the needs created by a change in the architectural outlook of which it was itself one of the symptoms. The greater men of the Gothic Revival had done their work or were approaching the end of their career. The movement had spent its force, and experience had proved that at any rate as regards the design of domestic and secular public buildings it had failed to justify the hopes raised in its early stages. Fergusson and Ruskin were, however, still the great luminaries in the student's firmament. Both, in spite of their great services to architectural studies, were ever—and at that time particularly—somewhat bewildering guides: Fergusson by his see-saw methods of criticism, alternately arousing admiration for the subject of his remarks and checking it by douches of cold water, a process which left a cloudy impression on the mind that the architects of all time had only failed of complete success because they had not had the advantage of Fergusson's collaboration; Ruskin by the enunciation at different times, or even in the same book, of mutually destructive principles. Like most of the writers of the Middle Victorian era they were unsympathetic to the Renaissance, and keener to detect superficial failure or excess in its works than those essential truths on which it is based. They did not see that its rise and spread was rendered possible and necessary because there was a whole side of man's æsthetic nature which mediæval art with all its triumphs had left unfed, and which could only find satisfaction in forgotten elements of design recovered by the study of the monuments of Greece and Rome.

The young men who went to Italy or the banks of the Loire, to our own Elizabethan manor houses, to Versailles, or to Greenwich, and saw there much that filled them with admiration, much that they wanted to sketch and imitate, when they came home and read their authorities found that it was all a mistake: they had been admiring a "pestilent art," they had been degrading their taste by studying mere "copying" styles; and great was their discomfiture. Anderson's book came as a balm to many a mind smarting under the lash of hostile and unfair criticism, or the scarcely less galling ordeal of half-hearted and patronising approval, but still cherishing in the teeth of his instructors a deep-seated if shamefaced love for the Renaissance. Here at last was a writer who spoke with authority yet appreciated ungrudgingly—no unreasoning fanatic, but one who could set forth convincing grounds for his admiration. When once it was realised that it was futile to apply to any art canons of criticism which its exponents do not

admit, or to vituperate them for not doing what they did not profess to do, the ground was cut away from under the feet of the opposing school. Anderson further deprived its criticism of much of its force by showing the importance of the early and more vital phases of the movement, which had been hitherto in large measure ignored, and treating rather summarily the—to him—less interesting later developments, which had hitherto borne the brunt of the attack.

There is something rather pathetic now in this polemical aspect of Anderson's work. The need for it which was still urgent when he wrote has to a large extent passed away. The world has moved on since the early nineties. A whole-hearted defence of the Renaissance was even then still a rather daring adventure, and if we are now allowed to indulge our proclivities in that direction without incurring the charge of moral obliquity, we are indebted for the privilege in no little degree to a group of works on the Renaissance in our own and other lands which appeared at that time, and foremost among them to the book before us which led the way back to the fountain-head in Italy.

Perhaps the world has moved further even than Anderson would have approved. The battle of the Renaissance being now won, to some of us it would not come amiss to see fuller treatment of the later periods. Anderson himself, in spite of his revolt against the teaching of his day, still retained—it is curious to notice it—a tinge of its prejudices, and when he reaches the seventeenth century not only compresses the whole of it and more into a single short chapter, but falls into his opponents' habits of abuse, and besprinkles his pages with such expressions as "decadence," "execrable work," "corrupt style," "impudent," "unprincipled," and so forth. He confesses, however, in his preface that in the interval between delivering his lectures and sending the book to press he had somewhat changed his point of view, and that a corresponding alteration in the book would have resulted in a complete re-writing. Whether such a revision would have included an extension in the direction suggested we have no means of knowing; but, considering the circumstances, his decision to retain the original form was no doubt a wise one, and Mr. Arthur Stratton in editing the present issue had no choice but to be bound by it. Nevertheless a full critical study of the whole achievement of the Italian Renaissance down to the end of the eighteenth century is much to be desired. A work of this kind would in no wise supersede Anderson's, which for many a long day will remain the best of all possible introductions to the subject. It would supplement it and open fresh fields of study for those who wish to go further than Anderson professes to guide them. It might also show us that there was perhaps something to learn from that dreadful bugbear the barocco style, that monster of licentiousness and shameless audacity whose very name causes a shudder of righteous indignation in right-minded bosoms, some lessons of forceful vigour and plasticity which we may sometimes look for in vain in more correct performances. It would certainly show that barocco does not cover the whole field of the seventeenth and eighteenth centuries, that the parallel stream of pure classicism produced some not altogether contemptible work. Something, it is satisfactory to observe, has been done in the new edition to mitigate the rather unjust treatment meted out to the later phases by expunging, for instance, such a passage as that in which the Genoese palaces were unduly depreciated, and by introducing reference to, and illustrations of, later examples.

Even had this not been done it would be ungrateful and unfair to quarrel with our author for not giving what he expressly disclaims the intention of giving. By his contribution of light and learning within the limits he laid down for himself, he placed architectural students under a lasting obligation. No small meed of gratitude is due to Mr. Stratton for the admirable manner in which in the edition before us he has filled up lacunæ, clarified obscurities, and generally strengthened the work by the removal of the blemishes—few and minute though they were—which it contained, as well as by introducing the slight alterations involved by changes in the illustrations. All this work, requiring both painstaking labour and wide knowledge, he has accomplished with complete success and almost excessive self-effacement. Although few paragraphs in the book are not in some way affected by the revision, only a close comparison between the editions could disclose his share in the work, while Anderson's individuality remains—as Mr. Stratton claims—stamped on every page. At the same time the bulk of the book is hardly at all increased except by the strengthening of the illustrations, which is a salient future of the new edition.

The alterations introduced by Mr. Stratton in this department are almost without exception for the better. The line that has been taken in many cases of supplementing photographs by measured drawings and *vice versa* results in the ideal method of presentment, enabling the reader both to judge of the effect produced and to analyse the methods used in producing it. Examples of cases where this has been done are the Cancelleria and Farnese Palaces in Rome, the Pazzi Chapel and Riccardi Palace at Florence, the Basilica at Vicenza, the organ in the Hospital Church at Siena, the Redentore and—now, alas! destroyed—Loggetta at Venice. Elsewhere a better point of view or a more instructive method of illustration has been chosen to replace that formerly given, as, for instance, in the Palazzi Bevilacqua and Albergati at Bologna, the tempietto at San Pietro in Montorio and the Farnesina, the Confraternità di San Rocco and the Library at Venice, the duomo and Santo Spirito

at Florence. Again, while several illustrations, whose interest was not strictly architectural, have wisely been omitted, their places have been taken by others of buildings not figured in previous editions, such as the Palazzo Pandolfini in Florence, the churches at Todi and Monte Pulciano, the Gran' Guardia Vecchia at Verona, the Palazzi Balbi and dell' Università at Genoa.* Another instructive and at the same time beautiful feature is a page on which four of the successive plans for St. Peter's are grouped together. Several of the new illustrations are reproduced from vigorous drawings by Mr. Leslie Wilkinson. Great pains have evidently been taken in the arrangement of the plates and other figures so as to ensure that, wherever it is physically possible, they should stand in convenient relation to the text they illustrate, and that mutually complementary figures should be opposite one another.

In conclusion there remains but to offer hearty congratulations to Mr. Stratton for the admirable way in which with the help and advice of Mr. R. Phenè Spiers he has carried out what must have been a harassing and somewhat thankless task, and to Mr. Batsford on the need for a new edition of this good book, so representative of the great traditions of his house, and on the enterprise displayed in bringing it up to date.

W. H. Ward [*A.*].

STAINED GLASS WINDOWS.

Windows: a Book about Stained and Painted Glass. By Lewis F. Day. Third Edition, revised and enlarged. 8o. *Lond.* 1909. *Price* 21*s. net.* [*B. T. Batsford, 94 High Holborn.*]

All the details of the history and craftsmanship connected with stained and leaded glass are deeply interesting to modern workers in this fascinating form of art. Mr. Day has, with great care and at great length, detailed the methods of the workers in the past—their beginnings and their developments onwards—from simple geometric forms of ornament to the pictured figure compositions of sacred art, legend, and story. The various methods described by him of fourteenth-century work are of great value to the artist and craftsman. They prove how the colour qualities of the metal—whether pot or flashed—are enhanced by well-considered painting-in of details of ornament, the use of the needle, stippling, rubbing off of high lights, or by any other means the artist may employ in the pursuit of his artistic ideal. Painting on glass forms a necessary screen and puts a seal on his colour, thus preventing the bleaching of the finer phases of its tones.

It is rather the fashion at present to advocate that a window should be treated as we do mosaic, having all its natural colour untouched by paint. The result of this method is a wholesale dilution of colour depths, so that fine rubies in a strong light become a pale pink, and so on in other colours. Apart from good colour, stained windows are capable of bearing many deeply interesting messages to humanity.

Mr. Day does not mention what many consider to be the finest windows in Spain—those in the cathedral and church of Sta. Maria del Mar in Barcelona. Spain has many fine examples of painting on glass with a liquid or full brush, showing the Spaniards' natural genius for direct technique in the manner of Velasquez.

We are always confronted by problems in art which gleanings from tradition will not entirely solve. In modern windows there are conditions of light and its admission, reflected light from other windows, of forms of openings, of the most suitable scale of figures and subjects to fill the small or large areas, of the illustration of modern incidents, &c. So that when we are armed with the devices of our own craft and that of the old men, there still remains a formidable wall to scale. Mr. Day, however, has given us a book of reference which should earn the gratitude of all students and craftsmen concerned with the making of windows.

In the preface it is stated that "we are workmen first and artists afterwards." Should not the last be first? The possession of the artistic instinct is the real justification for learning the craft which shall give it permanent form.

T. R. Spence.

ARCHITECTS' LAW REPORTS.

The Architects' Law Reports and Review, Vol. IV. By Arthur Crow [F.] and A. F. Jenkin, Barrister-at-Law. 10*s. net.*

With most of us law is at best but an uncertain thing, and anything which helps to clear up its mysteries is to be welcomed. The fourth volume of *The Architects' Law Reports* has recently been issued, and like its predecessors bears evidence of the care and skill bestowed by the editors upon this most useful publication. Architects in general are not fond of wading through the reports of judicial decisions in the newspapers in search of information which may be useful, and Mr. Crow has rendered a very great service to the profession in thus placing within such handy compass a clear and succinct record of the principal cases likely to interest architects and surveyors, whether practising in London or in the provinces. Mr. Crow's work in this direction deserves a much wider recognition; and members of the profession who have been accustomed to make paper cuttings of the cases which interested them might well save themselves much unnecessary labour and inconvenience. The idea of combining drawings of the more intricate cases with the ordinary judicial report is one that will commend itself to all architects.

* One is inclined to regret that among the new illustrations room could not have been found for the court front of the Palazzo Pitti, whose system of rustication has exercised a widespread influence, one instance of which is the Luxembourg Palace in Paris.

The cases reported in the present volume are thirty-eight in number, and cover a wide field—from arbitrations, compensations, and assessments, to professional practice, employer's liability, landlord and tenant, conveyance, light and other easements, London Building Acts, and Public Health Acts, drains and sewers, streets, highways, and bridges.

Among the most interesting cases recorded are reports of the following:—*Hunt* v. *Acton Urban District Council*, mention of which case has already been made in the JOURNAL. The Court held that an architect was entitled to recover fees from a public authority for the preparation of a modified scheme according to instructions, although the original agreement only was under seal.

Jones v. *Pritchard*.—This was an action between adjoining owners for an injunction to restrain a nuisance arising from smoke finding its way through a party-wall from a flue situated in the centre of the wall. It was held that an easement existed for smoke to pass into the flue, and that as the defendant had exercised his right fairly and reasonably, and in the manner intended when the easement was granted, the action for an injunction failed.

The cases dealing with rights of support and of easements of air and light are five in number. *Cable* v. *Bryant*, *Richardson* v. *J. H. Graham, Ltd.*, and *Hyman* v. *Van den Bergh*, dealing with light and air cases, being probably the most interesting of those reported.

Under the heading London Building Acts reports are given of seven cases: *County of London Electric Supply Co., Ltd.*, v. *Perkins*, in which it was held that the limited size of the structure or work involved—an electric cable street box—did not dispense with the necessity of serving a building notice as required by Section 145 (*a*) of the London Building Act 1894.

London County Council v. *Spink & Son*, dealing with the deposit of plans required by Section 7 (1) of the London Building Acts (Amendment) Act 1905.

Attorney-General v. *Metcalf & Greig and others*.—The height of buildings erected on a street less than 50 feet wide, and made since 1862, is limited by Section 49 of the London Building Act 1894 to the distance of the front or nearest external wall from the opposite side of the street. The Court of Appeal held that in measuring the height of the building it is not competent to the Court to take into consideration the distance of the front wall of each separate part of the building from the opposite side of the street; and that, where a small portion of the building is recessed behind the general line of frontage, the general line of frontage must be taken as the determining factor. It was also held that the section cannot be evaded by building a series of front walls in steps one behind the other. The building in question was a corner building fronting on a street 40 feet wide, the height, however, at a distance of 20 feet back being increased to 60 feet; and the Court held that the building had one line of frontage and one front wall exceeding 40 feet in height, and that it contravened the section.

Lilley & Skinner, Ltd., v. *L.C.C.*, *Fleming and others* v. *L.C.C.*—questions of building line in Pentonville Road and Euston Road.—The drawings reproduced in the latter case help very much in the elucidation of the arguments used.

Crosby v. *Alhambra Co.*, in which it was held that a party-structure notice to be served on an adjoining owner must be served on every person in receipt of rents or profits arising from such premises.

Moran & Son v. *Marsland*.—Covered water reservoirs were buildings or structures to which the duties of the district surveyor extended under the London Building Act 1894, and that the district surveyor was entitled to his fees.

Dealing with Public Health Acts and the vexed question of what constitutes a "drain" and "sewer," two cases are reported, *Bromley Borough Council* v. *Cheshire*, and *Wood Green Urban District Council* v. *Joseph*, the latter a House of Lords case of considerable importance which will prove very useful in a work of reference of this character.

Under the heading of streets, highways, roads, &c., seven cases are reported, nearly all of interest to provincial practitioners.

The volume contains a reprint of the London County Council (General Powers) Act 1908, Parts I.–III., IX., and also of the Telegraph (Construction) Act 1908, with notes on the bearing of the new sections upon the older enactments on the same subjects.

Another feature which should interest metropolitan readers is an article headed "Housing and Town Replanning," by Mr. Arthur Crow, in which the author extends the idea of the new avenue suggested by the Royal Commission on London Traffic, and reviewed by Mr. Paul Waterhouse at the Institute in 1906, and suggests the formation of a central avenue and boulevard, from Shepherd's Bush to Canning Town, running approximately parallel with Oxford Street and Euston Road. The width of the avenue is suggested as 225 feet between the buildings, allowing 75 feet for each side of the avenue and 75 feet for the central boulevard. The idea is that for each half of the avenue a double line of trams should be provided, one track being reserved for express cars and the inner line of rails for cars stopping at the ordinary intervals.

The article is well illustrated by photographs showing the possibilities of the scheme, and it is undoubtedly one which will have its influence on the final fruition of any such proposal. The author wisely refrains from any estimate as to the

cost of the scheme, but contents himself with allowing the whole to be spread over a period of twenty to twenty-five years, the more congested sections being naturally dealt with first. There are many points which are worthy of considerable study in such a proposal, and Mr. Crow is to be congratulated on having reintroduced such a topical subject in the present volume of *Architects' Law Reports.*

W. R. Davidge [*A.*].

BUILDING CONSTRUCTION.

Building Construction: A Text Book on the Principles and Details of Modern Construction, for the Use of Students and Practical Men, by Charles F. Mitchell, assisted by George A. Mitchell. Sixth Edition. 8o. *Lond.* 1909. *Price* 6*s.* [*B. T. Batsford*, 94 *High Holborn, W.C.*]

Mr. Mitchell's well-known work, now in its sixth edition, contains much additional matter which cannot fail to be of service to students. Several branches of the subject, which in the previous edition were grouped together, now occupy each a separate chapter. This is the case with concrete, asphalte, brickwork, flues, &c., and girders. The whole of the first chapter is now devoted to limes and cements, with new matter, including descriptions of processes of manufacture and illustrations.

The subject of concrete is treated in chapters ii., xii., and xxii., which deal respectively with the material as used in foundations and reinforced beams, &c. There is much useful information as to the behaviour of concrete under various tests, the chapter on foundations being considerably enhanced in bulk and including diagrams and calculations relating to grillage foundations and ferro-concrete piles.

Some of the author's statements are well within the mark for safety. For instance, at p. 236 we have a table in which the safe load upon concrete foundations formed with Portland cement and ballast in the proportion of 1 to 6 is stated at 15 to 20 tons per square foot after twelve months' age of the concrete. Such concrete will safely stand a pressure of 50 tons per square foot. But the essential fact is that most concrete foundations have to receive their full load at a much earlier age; and 25 to 30 tons per foot after one month is not too much. It is to be regretted that in London a recent enactment limits the pressure upon all concrete foundations, without discrimination, to 12 tons per square foot—a fact not noticed in the present work, doubtless because its pages were made up before the enactment in question became law.

The author deals fully with the subject of reinforced concrete, with some additions since his previous edition, including extracts from the Institute's Report (1907). Perhaps, in a future edition, some space might be devoted to the reduction in value of the elastic modulus of concrete when subjected to compression.

A whole chapter is devoted to fire-resisting construction, and it may be suggested that the remarks on concrete as a fire-resisting material for purposes of the London Building Acts (Amendment) Act, 1905, which the author includes in the chapter on concrete (p. 43), might more appropriately have found place in the twenty-first chapter at p. 551. In the above remarks he has omitted to mention that 5 inches of concrete between wood floor joists, as well as when used in combination with iron or steel, is deemed to be fire-resisting under the above Act.

The chapters dealing with stones and br icks are copious, the latter containing illustrated descriptions of processes of manufacture. Here it would seem that the particulars of the strength of brick piers should have been included in chapter xiii., dealing with brickwork. The table quoted at p. 130, giving what purports to be the ultimate strength of brick piers having a height of less than twelve times their least thickness, is not of much use, since the greater thicknesses are not given, and one hesitates to think that such degrees of strength apply to square piers of such height.

In a separate chapter on flues, fireplaces and tall chimneys, there is much useful matter, fully illustrated. It is doubtful if many architects would endorse Mr. Mitchell's confident pronouncement at page 299 in favour of 9 inch square flues in preference to those 14 in. by 9 in., "as, on account of the smaller sectional area, a greater draught is created." The size of a flue should be considered in relation to its height, and any increase of lineal velocity through reduction of area is accompanied with reduction of velocity of volume through friction against the sides of the flue.

In the chapter on timber the author deals with conditions of growth, seasoning, conversion, and properties of numerous kinds. In his particulars of the strength of timber (pages 183–4) it would be better if he had given the highest and lowest values found by experiment, the range of variation being probably greater in this than in any other material of construction. The crushing resistances of northern pine, spruce, fir, and teak are all stated at 2·5 tons per square inch; whereas the resistance of teak is usually found to be about 30 per cent. higher than the other two woods. Possibly there is a printer's error here. There is an excellent chapter on carpentry, dealing with the construction of scaffolds, gantries, travellers, and derrick cranes, with ample illustrations. Shoring is also fully treated, except that the common practice of using rolled steel joists as needles is not mentioned.

The great and still growing importance of iron and steel in construction receives due attention in a chapter devoted to these materials and in the chapters on pillars, girders, and roofs. The table of the strengths of iron and steel at page 152 is not as instructive as could be wished. The ultimate tensile resistance of cast iron is stated at 7 to

8 tons per sectional square inch. Mr. Hodgkinson found it in some cases as low as 5 tons, and lower values are recorded. The compressive resistance of mild steel is stated at 22 to 35 tons, followed by the note, "30 usually employed"; but it will be found that the resistance is rarely more than 22 tons, and frequently 25 per cent. less than this. At page 153 it is stated that "It is usual not to let the working load upon a long pillar exceed one-tenth of its ultimate resistance." The phrase "long pillar" is a vague one. With regard to cast-iron, the rule will apply well enough, but with mild steel a factor of 4 is in frequent use up to 40 diameters in height.

The useful and instructive chapter on girders is preceded by one on graphic statics, which should claim more attention from students than the subject usually receives. It is to be regretted that the formula (misprinted "formulæ") at page 466 is not correctly stated in the following paragraph: "The moment of the load must equal the moment of resistance of the material at the instant of breaking; and if M represent the moment, L the load, say, in lbs., and R the ultimate resistance of the material in lbs. per square inch of section, then ML=MR."

Here the author applies the symbol M to two values which are not necessarily equal, involving the conclusion that L=R: a puzzling statement for students.

The subject of sanitation is fully discussed, with new matter and helpful illustrations, in chap. xxvi. Exception may be taken to the principle of building walls to manholes in two separate half-brick thicknesses, as advocated at page 691, to render the manhole less liable to leak. This is of little advantage unless a layer of asphalte or other impervious material is provided between the two thicknesses. It would be better to carry up 9-inch walls, properly bonded and treated with asphalte on the faces next to the earth.

Space does not admit of a more detailed notice of this voluminous work, which comprises almost every branch of its subject. There is an appendix containing examination questions set by the Institute and other societies, and there is a copious index.

GEORGE H. BLAGROVE.

AMERICAN COMMITTEE'S REPORT ON REINFORCED CONCRETE.

In 1903 the American Society of Civil Engineers—a Society which corresponds to our Institution of Civil Engineers—appointed a committee to consider the question of steel and concrete in co-operation with other Societies interested in the subject. This committee, which included many of the best known American authorities, has issued an interim report, which is given *in extenso* in *Concrete and Constructional Engineering* for October.

The Report of the Royal Institute of British Architects is now very largely used here and in the British Colonies, and it is a matter of some interest to compare the two documents.

The British Report was issued on 27th May 1907, some two years before the American, and the increase in knowledge and experience in that time may well lead to variation on the views previously held. The main propositions advanced in the Report adopted by this Institute are, however, found unaltered in the American Report.

The opening paragraph in it reads: "The adaptability of concrete and reinforced concrete for engineering structures, or parts thereof, is now so well established that it may be considered one of the recognised materials of construction. It has proved to be a satisfactory material, when properly used, for those purposes for which its qualities make it particularly suitable."

Fears as to its durability and the damage of corrosion of the reinforcement by various causes have restricted the use of this material by our people, more especially as the Local Government Board refused in granting loans for public works to consider reinforced concrete structures as having the same life as other structural materials.

The Council of the Institute, in reply to a question addressed to them by his Majesty's First Commissioner of Works, gave the view of its Science Committee that there was no reason to fear decay or injury with proper material and workmanship, and it is interesting to find these views confirmed in the following paragraphs of the American Report:—

"4. Destructive Agencies: (*a*) Corrosion of Metal Reinforcement.—Tests and experience have proved that steel embedded in good concrete will not corrode, no matter whether located above or below fresh or sea water level. If the concrete is porous so as to be readily permeable to water, as where the concrete is laid with a very dry consistency, the metal may be corroded in the presence of moisture.

"(*b*) Electrolysis.—There is little accurate information available as to the effect of electrolysis on concrete. The few experiments that are available seem to indicate that concrete may be damaged through the leakage of small electrical currents through the mass, particularly where steel is embedded in the concrete. These experiments are not conclusive, however, and the large number of reinforced-concrete structures subject to the action of electrolysis, in which the metal and concrete are in perfect condition, would seem to indicate that the destructive action reported was due to abnormal conditions which do not often occur in practice.

"(*c*) Sea Water.—The data available concerning the effect of sea water on concrete or reinforced

concrete are inconclusive and limited in amount. There have been no authentic cases reported where the disintegration has proved to be due entirely to sea water. The decomposition that has been reported manifests itself in a number of ways; in some cases the mortar softens and crumbles, in others a crust forms which in time comes off. It has been found, however, that where concrete is proportioned in such a way as to secure a maximum density and is mixed thoroughly, it makes an impervious concrete, upon which sea water has apparently little effect. Sea-walls have been standing for considerable lengths of time without apparent injury. In many of our harbours, where the water has been rendered brackish through the rivers discharging into them, the action that has been reported has been at the water line and was probably due in part to freezing.

"(*d*) Acids.—Concrete of first-class quality, thoroughly hardened, is affected appreciably only by strong acids which seriously injure other materials. A substance like manure, because of the acid in its composition, is injurious to green concrete, but after the concrete has thoroughly hardened it satisfactorily resists such action.

"(*e*) Oils.—When concrete is properly made and the surface carefully finished and hardened it resists the action of such oils as petroleum and ordinary engine oils. Certain oils which contain fatty acids appear to produce injurious effects.

"(*f*) Alkalies.—The action of alkalies on concrete is problematical. In the reclamation of arid land, where the soil is heavily charged with alkaline salts, it has been found that concrete, stone, brick, iron, and other materials are injured under certain conditions. It would seem that at the level of the ground water such structures are disintegrated—possibly due in part to the effect of formation of crystals resulting from the alternate wetting and drying of the surface of the concrete at this ground water line. Such destructive action can be prevented by the use of an insulating coating which will prevent this action from taking place."

There are differences in regard to minor matters: for instance, 97 lbs. of cement is taken as the equivalent of a cubic foot instead of 90 lbs.; the width of slab acting with the rib in a T beam is restricted to a quarter of the span in place of one-third, and is also limited so that its overhanging width on either side of the beam shall not exceed four times the thickness of slab.

In regard to fire protection, it is pointed out (as in the Royal Institute Report) that the amount of protective covering required depends on the degree of heat to which the structure may be exposed. A two-inch covering for girders and columns, one and a half inch for beams, and one inch for floor slabs, is recommended for ordinary conditions, conforming to our own advice.

Various points upon which the British Committee were unable to come to a unanimous finding, and consequently omitted from the report, are dealt with.

This confirmation of the findings of the Institute's Committee by an independent body of American engineers, working with the fuller knowledge of recent years, is a matter of congratulation.

The Institution of Civil Engineers, which declined to join with us in the inquiry of three years ago, has appointed a committee of its own to deal with the matter, and it will be interesting to see what conclusions it arrives at.

WILLIAM DUNN [*F.*].

THE LATE CHARLES FOLLEN McKIM.

It was with great interest that I read the "personal note" by Sir Aston Webb on the late Charles Follen McKim in the JOURNAL of 16th October. It was so exquisitely done that it may seem invidious for me to attempt to add anything further; but as one who had the special privilege of coming into close contact with Mr. McKim for a period extending to nearly three years I may be permitted to add my personal note.

We were appointed joint architects in conjunction with Mr. Mead for a large and important building in Canada, and in the course of collaboration I came greatly to admire Mr. McKim's many-sided admirable qualities and genius. On my numerous visits to New York I always received the most kindly reception, and the charming feeling of comradeship with which he always treated me was keenly appreciated. From the acknowledged pre-eminent position he justly held amongst the profession in the United States, he might naturally have overpressed his opinions and wishes on one who frankly felt his own inferiority, but I never found him to be anything but most considerate in all our deliberations. He occasionally came up to Montreal, and we then had the most enjoyable times together. I never met anyone who had greater persuasive powers with committees and clients, and I remember on one occasion when we desired to carry out a special scheme which was not very favourably viewed by our clients, the very adroit and clever way in which he carried his point and triumphed was something good to remember. He impressed his strong personality on men, not by pushfulness or by arrogance—quite the contrary, for he was always quiet, most refined and gentlemanly—but by the force of the beauty and significance of his ideas and expression, which he had the rare faculty of presenting in the most charming way.

I remember his telling me that one of the most interesting and at the same time difficult pieces of work he had to do was the restoration of the White House at Washington in 1902, in which President Roosevelt took the greatest interest. This was carried out most successfully. The original archi-

tect of the White House was James Hoban, a native of Dublin, whose designs were selected in competition in 1792. In President Roosevelt's message to Congress in 1903 he said: "Through a wise provision of the Congress the White House, which had become disfigured by incongruous additions and changes, has now been restored to what it was planned to be by Washington. In making the restorations the utmost care has been exercised to come as near as possible to the early plans and to supplement these plans by a careful study of such buildings as that of the University of Virginia which was built by Jefferson. The White House is the property of the nation, and, so far as is compatible with living therein, it should be kept as it originally was for the same reasons as we keep Mount Vernon. The stately simplicity of its architecture is an expression of the character of the period in which it was built, and is in accord with the purposes it was destined to serve: it is a good thing to preserve such buildings as historic monuments which keep alive our sense of continuity with the nation's past."

The restoration was refined and scholarly and carries out the idea of a stately old Colonial mansion. Mr. McKim was criticised for not making it much more gorgeous and grand internally, but his work had, I think, the approval of all for whose approval he cared. The report of the architects and the message of the President to the Senate on the subject, with a large number of illustrations and scale plans and photographs of the restorations, were printed for private use in book form, and I was much gratified by Mr. McKim presenting me with a copy,—which I greatly value, with his written characteristic inscription on the fly-leaf,—"From one fellow to another. New York 1903."

Another work into which he threw himself with all his strong force was the design for the improvement of Washington. He had been selected by the Government along with Mr. Burnham of Chicago and Mr. Olmsted to undertake this. They travelled over Europe, visiting a number of cities; it was largely left to Mr. McKim, I believe, to embody their ideas, and with his customary thoroughness he took special offices over the firm's offices and engaged a special staff for the work. It was my privilege, on one of my visits, to be shown by Mr. McKim his elaborate and beautiful drawings for this great scheme as they were in course of preparation, and I remember Mr. Mead, his partner, saying laughingly to me—"You are in luck, as I have not seen the drawings myself!" I was informed that this work was entirely honorary, and no remuneration was paid beyond expenses, but I do not think that mattered to Mr. McKim; he was a true artist in his love for the work itself, independently of dollars and cents.

The three members of the firm of McKim, Mead, and White were each remarkable men. Mr. Stanford White I had no professional dealings with, but often saw him. His vitality and energy were amazing; generally in his shirt-sleeves in the office, he was always on the rush, often on the run,—eager, brilliant, unpractical, impatient of limits and conventions; generally his motor-car was at the door waiting to whisk him off to some work. Of the three, Mr. Mead only is left, and of him also I saw a great deal during nearly three years of our most pleasant collaboration. An extremely able architect himself, he was more practical than either of the others, and kept them from soaring too far out of sight. Personally he is a most delightful man, and I am glad of this opportunity of paying this tribute to a friendship that will always be dear to me.

Some years ago, after the death of Mr. White, four of the brightest of the young men in their office were taken into partnership, and they will, I feel sure, second Mr. Mead in worthily carrying on the best traditions of the firm.

ANDREW T. TAYLOR [*F.*], L.C.C.

CORRESPONDENCE.

CASTS AT THE BRITISH MUSEUM.

Sarcophagus of Alexander Severus.

British School at Rome, Palazzo Odescalchi, Piazza SS. Apostoli, Rome: 12 *Nov.* 1909.

To the Editor JOURNAL R.I.B.A.,—

SIR,—In reply to Mr. R. Langton Cole's letter on page 748 of Vol. XVI. of the JOURNAL, may I be allowed to point out that Piranesi is only reproducing the account of the discovery of the vase which was current in his own day. The official record of the sitting of the Communal Council of Rome on 4th May 1582, published by Professor Lanciani in the *Storia degli Scavi* (ii. 87), proves that the sarcophagus had by that time already been discovered, inasmuch as the possibility of its purchase for the municipal collections was then considered, though it was not actually acquired until 1590. There is, on the other hand, no mention of the vase until 1642, and it was not until 1697 that Pietro Sante Bartoli definitely committed himself to the statement that the vase was found in the sarcophagus. Had this been true, the vase would certainly have been mentioned in the description of the discovery of the sarcophagus by Flaminio Vacca. That it should have lain unnoticed in the sarcophagus until the time of Urban VIII. (1623–44) is inconceivable, as I now recognise, though I admitted this possibility in *Papers of the British School at Rome* (iv. 53). These facts were fully set forth by Mr. H. Stuart Jones at an open meeting of the School on 1st February 1909, reported in *Athenæum*, 27th February 1909, p. 265, and *Builder*, 13th February 1909, p. 174.—Yours faithfully,

THOMAS ASHBY.

"THE CHURCH ORGAN."

[JOURNAL, 6th November, p. 25.]

Haileybury College, Hertford: 11th November 1909.

To the Editor JOURNAL R.I.B.A.,—

SIR,—The Report of 1891, to which Mr. Statham kindly refers me, I am quite familiar with. There seems to be no reason for retracting anything I said in my inadequate notice of his excellent book, though I may add that, in the case of a college or private chapel we have a decidedly different, and, in many ways, more favourable, aspect of the problem from that which presents itself in the case of a parish church. The latter was in my mind when I wrote the sentence to which Mr. Statham alludes, and it would be interesting to know how far, during the last eighteen years, such recommendations of the Committee as would involve considerable departure from normal planning have been substantially adopted, even in the case of new churches.—I am, yours obediently,

F. H. CLIFFE.

THE R.I.B.A. SCALE OF CHARGES.

To the Editor JOURNAL R.I.B.A.,—

SIR,—It is quite cheering to read the letter of "A Fellow" in the JOURNAL of 6th November. If only the scale of charges which he enumerates could be brought to pass architects would be in a fair way to receive adequate remuneration for their labours. Unfortunately at the present time there is an increasing demand that architects should take less than the commission of 5 per cent. now recognised by the Institute as the proper fee. I have in my mind at the present time the names of two architects, one an Associate of the Institute, who invariably take their work at 3 per cent. to 4 per cent., and so tend altogether to lower the tone of the profession. Personally I think that before the Council issue a new scale of charges they should insist that every architect who has the proud privilege of being a member (of whatever class) should not take work at less than the agreed scale, under pain of expulsion or some other penalty. I need not point out how absurd and misleading it is to the general public for Institute men and other architects to accept lesser fees. Besides completely spoiling "the market," it is mean and despicable to undercut one's "brother chip." "What can't be cured must be endured," but the Institute have it in their power to redress this growing evil. Will no one on the Council take it up?—I am, Sir, yours faithfully,

ANOTHER FELLOW.

In the distribution of His Majesty's Birthday Honours a knighthood was conferred upon Mr. James Lemon [*F.*], M.Inst.C.E., whose labours have contributed so greatly to the advancement of Southampton.

9 CONDUIT STREET, LONDON, W., 20*th November* 1909.

CHRONICLE.

Presentation of Mr. Collcutt's Portrait.

Prior to the reading of Mr. Triggs's Paper last Monday the interesting function was performed of unveiling and formally presenting to the Institute the portrait of Mr. Thomas E. Collcutt, *President* 1906–1908. The portrait, an admirable and striking likeness, has been subscribed by members of the Institute and is the work of Mr. A. S. Cope, A.R.A.

The PRESIDENT, in accepting the portrait on behalf of the Institute, said that this addition to its portrait gallery, though the last, was by no means the least of its treasures. They were all very glad to have a memorial of Mr. Collcutt's Presidentship. He had always been a sincere friend of the Institute both in office and out of office. In Mr. Collcutt's presence he could not say the things he was tempted to say about him; they all felt, however, that in him were united qualities which ought to be united in every architect, but which very seldom were. He was a thorough man of business, a man of affairs, a man with the soundest judgment, and at the same time a consummate artist. Mr. Collcutt, he thought, would esteem himself fortunate in being handed down to posterity in the beautiful portrait Mr. Cope had painted for them. While engaged in the work the artist, he understood, had received alternate sittings from the Royal Patron of the Institute and from Mr. Collcutt. In the portrait Mr. Collcutt was seen wearing the Royal Gold Medal which the Institute had awarded him, and for that reason, he believed, he was represented in dress-clothes; the artist, however, had put him in a crumpled shirt-front to give the pleasant *négligé* air of the sitter. They all thanked Mr. Cope most heartily for the beautiful work he had produced.

Mr. JOHN SLATER [*F.*] said they must all agree that the portrait was a most agreeable addition to the galaxy which adorned their walls. He could add nothing to what the President had said as to the appreciation of members of Mr. Collcutt's services as their President. Mr. Collcutt, he

believed, was a little bit shy at accepting the office; but he had filled it in a manner that must have gone to the heart of every member of the Institute. He could only echo the President's words in congratulation of Mr. Cope on the charming portrait he had given them; and they might also congratulate Mr. Collcutt on being handed down to posterity in such a beautiful work of art.

The Proposed St. Paul's Bridge and Widening of Southwark Bridge.

A special meeting of the Court of Common Council was held last Monday at the Guildhall to discuss the report of the Bridge House Estates Committee relating to bridge accommodation in the City. The Bridge House Estates Committee recommended (1) the construction of a new bridge at an estimated cost of £1,646,983; and (2) the reconstruction of Southwark Bridge to the width of Queen Street Place, at a probable expense of £261,000, it being understood that the alterations to Southwark Bridge should be proceeded with as soon as Parliamentary powers were obtained.

Mr. Deputy Algar, in moving the adoption of the report, said the Committee did not regard the widening of Southwark Bridge as a solution of the traffic question. The Royal Commission on London Traffic strongly advocated a new bridge, with a direct north to south thoroughfare. Southwark Bridge was not the place where the general north and south traffic could be relieved. With the rapidly changing conditions of modern locomotion and transit a new bridge with an adequate approach had become an urgent necessity.

Mr. W. W. Green moved as an amendment that the Court should agree only with as much of the Committee's report as related to the widening of Southwark Bridge. He said that the suggested new bridge would seriously affect and impede the traffic from east to west, which included the traffic from the docks and the Port of London.

Mr. A. C. Morton, M.P., said that if the Corporation went to Parliament with the Southwark Bridge project alone they would probably be laughed at as making a quite inadequate proposal in view of the report of the Royal Commission.

On a division the amendment was lost by 95 votes to 60, and the Committee's report was carried.

Canterbury Cathedral.

The Dean of Canterbury, Dr. Wace, in a recent letter to *The Times*, supplements Mr. Caröe's letter (reprinted in the last number of the JOURNAL) with some account of the ancient wall paintings at Canterbury to which Mr. Caröe referred. These paintings were disclosed in the course of some necessary repairs in the remains of the Infirmary Chapel which was part of the old Benedictine Monastery of the Cathedral.

This Infirmary Chapel, of which some arches and windows remain outside the Cathedral on its north-west corner, dates from about 1140 A.D. The Northern Sanctuary of the Chapel, clearly shown upon an original Norman drawing still in existence, was barrel-vaulted, the walls and the vault being covered with paintings upon plaster after the manner of the time. But about 1340 the Norman Sanctuary was converted into the architectural style of that date; and, in the process, the earlier walls were thickened by the addition on the inside of a skin of walling 18 inches thick. Thus the old Norman wall paintings were covered; and where the new wall was tied to the old by bonding the paintings were destroyed. But where the bonding was not applied the paintings were simply covered over by the new wall, and some of them remain to this day virtually intact.

The paintings may now be seen in the very condition they had assumed after exposure on the old walls for some two hundred years, in what was probably the purer atmosphere of those days. The colours are wonderfully bright, fresh, and unfaded. Upon the vault are two angels in an attitude of adoration, probably towards some representation of our Lord's figure which would be painted in the centre of the vault, or possibly in the vault of the apse. Beneath the angels is a circle, enclosing a dog and a ram, one superimposed upon the other. Upon the wall is the figure of a soldier in chain armour and a gorgeously decked blue surcoat, together with portions of the figure of the Blessed Virgin with the Holy Child in her arms. The foot of the Virgin is well and gracefully portrayed in a very realistic manner.

Dr. Wace renews his appeal for the considerable sums which are still needed for repairing the Western Towers of the Cathedral and for some internal work, such as strengthening those piers of the Central Tower of which the condition is described in Mr. Caröe's letter. Of the £20,000 appealed for, only £5,000 has been received, and the greater part of this has been already expended.

Winchester Cathedral.

Owing to lack of funds the Winchester Cathedral authorities have decided to curtail the operations at present proceeding, and a substantial reduction of the staff employed has been made, only about forty or fifty hands being retained to carry on absolutely necessary work at the central tower and the north and south transepts. The recent appeal by the Dean for £23,000 to complete the work has brought in subscriptions amounting to about £5,000. A sum of about £18,000, however, is still required, and until there is a substantial response the work on the nave aisles will have to remain in abeyance. The work of underpinning at the transepts, which is absolutely imperative, will go on, but the Dean and Chapter are determined to avoid incurring debt.

London Building Acts Amendment Act 1909.

The London County Council (General Powers) Act 1909 became law after the Royal Assent on the 16th August last, and Mr. Batsford is issuing in pamphlet form sections 20 to 27, composing Part IV., Amendment of the London Building Acts. Section 22 comprises thirty-five sub-sections relating to buildings of iron and steel skeleton construction, and the foundations, walls, floors, staircases and other parts of the structure. These sub-sections set out regulations for calculating constructive metalwork in different classes of buildings; the working stresses to be adhered to in future for cast iron, wrought iron, and steel; the pressures to be allowed on brickwork and foundations of different kinds, &c. Section 23 empowers the London County Council to make regulations for the use of reinforced concrete in the construction of buildings. Section 25 adds to the Tribunal of Appeal a fourth member, to be appointed by the Council of the Institution of Civil Engineers. The pamphlet under notice forms Appendix VI. to Messrs. Banister [*F.*] and H. Phillips Fletcher's *London Building Acts*, 4th edition, and is published at 6*d.* net.

Millenary Celebration at Glastonbury.

A facsimile reproduction is to be published next month of the beautifully illuminated Address presented to the Princess of Wales on the occasion of the Millenary Celebration at Glastonbury Abbey last June. The publication is the work of the Glastonbury Guild of Sacred Art, and will consist of ten sheets, upon which will be faithfully portrayed the texture and handiwork of the artists, the whole tastefully bound in covers. The Address, which was composed by Mr. Bligh Bond, takes the form of a welcome from the monks of the olden time; it is couched in the style of the later years of the fifteenth century, and gives an imaginative description of the ancient glories of the Abbey Church. The black-letter was written by Mr. Bligh Bond, and the illumination designed and executed by the Rev. R. Jeffcoat, of Bristol. The edition will be limited to 150 copies, at the subscription price of one guinea a copy. The publisher is Mr. E. Everard, 38 Broad Street, Bristol.

The late Thomas Worthington [*R.F.*].

At the General Meeting of the Institute last Monday the decease was formally announced of Mr. Thomas Worthington, of Manchester, Fellow since 1865, and past Vice-President. Mr. Henry T. Hare, *Hon. Secretary*, in making the announcement, recalled Mr. Worthington's long connection with the Institute, which dated back to his young student days in 1846, when he was awarded the Silver Medal for an Essay on the History and Manufacture of Bricks. On the motion of Mr. John Slater [*F.*], seconded by Mr. Edwin T. Hall [*F.*] and supported by Mr. J. J. Burnet, A.R.S.A. [*F.*], the Meeting resolved that a message of sympathy and condolence be addressed on behalf of the Institute to the family of the late Fellow. A memoir of Mr. Worthington has been very kindly undertaken for the JOURNAL by Mr. Paul Ogden, and will appear in an early issue.

COMPETITIONS.

Workington Technical School Competition.

Members of the Royal Institute of British Architects are requested not to take part in the above Competition.

By order of the Council,
IAN MACALISTER, *Secretary.*
17*th November* 1909.

ALLIED SOCIETIES.

Leeds and Yorkshire Architectural Society.

The first general meeting of the winter session was held at the Society's rooms, Park Street, Leeds, on the 4th November. The President, Mr. Percy Robinson [*F.*] announced the results of the Society's Annual Competitions, which, although lacking the keenness of previous years, had called forth work of a higher standard, the selection of sketches exhibited being particularly good. The prizes were awarded as follows: Silver Medal and President's Prize for Measured Drawings to Mr. P. de Jong; Prize for Design to Mr. P. de Jong; Prizes for Sketching and Construction to Mr. J. H. Farrar; Prize for Essay to Mr. F. Scatchard; Holden Prize for Testimonies of Study to Mr. F. L. Kruckenberg.—Sketching Club Competitions: Prize for best set of studies of ancient buildings awarded to Mr. G. H. Foggitt; Prize for best set of Sketches to Mr. P. de Jong; Prize for second best set of Sketches (consolation prize) to Mr. C. T. Whiteley.

At the annual gathering of the Society at the Queen's Hotel, Leeds, on the 11th November, Mr. Percy Robinson [*F.*] delivered his Presidential Address, from which we give the following extracts:—

The Town Planning Bill is still before Parliament, and is receiving the usual buffeting about which invariably falls to the lot of controversial matters or legislation introducing new principles and ideas. It is to be hoped, however, that the Bill will not be sacrificed to meet the exigencies of the political situation, because whatever opinions there may be upon the methods of procedure and minor details, there is no doubt that the vital principle is good, and we, as architects, ought certainly to endorse it.

Speaking on this matter last year, I suggested that the local Advisory Committees proposed to be formed in connection with town-planning schemes might be useful, not only in connection with the immediate object in view, but that the scope of their work might well be extended to watching over the artistic amenities and evolution of our towns and cities in other directions.

This idea has taken a concrete form in New York, where, at the instance of the late President, Mr. Roosevelt—following a suggestion made by the Ameri-

can Institute of Architects of Washington—a Council of Fine Arts has been created, and directions have been issued that for the future "before any plans are formulated for public buildings or grounds, or for the location or erection of any statue," the heads of Executive Departments, bureaus and commissions must submit the matter to the Fine Arts Council and follow their advice, "unless for good and sufficient reasons the President directs otherwise." We have, in such an action as this, evidence not only of the enterprise of our brethren across the seas, but of their growing appreciation of architectural art, and it is an example that we might copy with advantage.

Leeds, like many other cities, has grown in a haphazard fashion without any definite plan of development, and, as a result, we are suffering in all directions at the present day from this lack of foresight. We have dog-legged streets wandering about in an apparently aimless fashion and leading to nowhere in particular. We have our public buildings scattered about in all directions and cramped up on ill-considered sites. Our library and art gallery are in a back street, and our latest acquisition, the statue of Queen Victoria, is stranded on its pedestal in a desert of cobble pavement without any relation or connection with its surroundings. All this is due to the lack of a properly thought-out comprehensive scheme in the beginning.

Civic art has even a commercial value quite apart from the influence it may have on the lives of the citizens. This fact is usually lost sight of by the man who is absorbed in business pursuits: he fails to realise that it pays to have beautiful streets and beautiful cities, but such is undoubtedly the case, and if Leeds is to become the shopping centre of the North, which is the ambition of our tradespeople, it is well that they should bear this in mind and do all in their power to render it attractive.

Then again had our cities been developed on town planning lines there would have been other and more tangible results which would appeal more directly to the average ratepayer. Enormous sums of money would have been saved which have been spent in street improvements and in undoing what has been done, whilst profits might have been made from the acquisition of undeveloped land. In several German cities no rates are levied because long ago they foresaw the direction of the growth of the suburbs, acquired land for new thoroughfares, and bought cheap land the rent of which now pays for the public services.

If we were able to start *de novo* with the assistance of a Town Planning Bill and the advice of a Committee such as has been suggested we might produce a very different Leeds from that which exists to-day, but our efforts are perforce restricted to making improvements as opportunities arise. Much good work has already been done in this direction. The centre of the city has undergone a considerable transformation of late years, and at the present time a great area of insanitary buildings is being demolished and the district remodelled under the guidance of one of our members, Councillor G. F. Bowman, who is Chairman of the Development Committee.

The work executed by our students shows a distinct advance year by year, not only in draughtsmanship and a grasp of constructive principles, but it shows evidence of independent thought, new ideas, and above all, ambition. The future of our art is in the hands of youth, and youth without ambition is an empty vessel: it is therefore encouraging to see these signs of new developments and the setting up of new ideals. Whilst we must recognise that we cannot cut ourselves entirely adrift from tradition, that the study of old work must be our starting-point, yet we must also remember that it is only a means to an end and not the end itself. Raking up the dry bones of the past will never produce a living structure, but we may draw upon the past so far as it will help us to solve the problems of the present and enable us to devote our strength to scaling new heights of achievement.

The desire for distinction of some kind tempts one at times to leave the beaten paths and to enter on experiments in new and unfamiliar methods. Such a course demands courage, and inevitably leads to many risks and disappointments, but its tendency must be good in that it implies a desire for progress; and it is possible that this spirit which permeates the rising generation of architects, combined with the introduction of modern conditions and methods of construction which demand something outside the traditional forms of expression, may be the means of carrying forward our art in a manner comparable in some degree with the most active periods of architectural evolution.

The greatness of Greek art is due partly to the fact that it was not fettered by tradition but was free to develop in the way that suited it best and to establish its own principles, and partly to the favourable conditions and spirit of the age. The Greeks lived in a beautiful world which influenced and found expression in their works. But there is beauty in every age; even now in our restless modern life beauty is to be found by those who seek it, and the student cannot set himself a greater ideal than to produce an architecture true to and expressive of the life of to-day, to grapple with the complex and difficult problems which arise out of these modern conditions, and turn what appears to be a restriction into an advantage, to mould his difficulties into success and triumph over his imposed conditions. This is the spirit which, if constantly pursued, is bound eventually to lead to achievement.

MINUTES. II.

At the Second General Meeting (Ordinary) of the Session 1909–10, held Monday, 15th November 1909, at 8 p.m.—Present: Mr. Ernest George, *President*, in the Chair; 42 Fellows (including 19 members of the Council), 34 Associates (including 2 members of the Council), and numerous visitors, the Minutes of the Meeting held 1st November 1909, having been published in the JOURNAL were taken as read and signed as correct.

The Hon. Secretary having announced the decease of Thomas Worthington, of Manchester, *Fellow* and *Past Vice-President*, the Meeting resolved that the regrets of the Institute for the loss of its distinguished Fellow be entered on the Minutes and that a message of the Institute's sympathy and condolence be conveyed to his family.

The President unveiled and formally accepted for the Institute a subscription portrait of Mr. Thomas E. Collett, *Past President*, painted by Mr. A. S. Cope, A.R.A.

A Paper by Mr. H. Inigo Triggs [*A.*] on THE PLANNING AND LAYING-OUT OF PUBLIC PLACES having been read by the Secretary in the absence of the author, and illustrated by lantern slides, a discussion ensued and a vote of thanks was passed to Mr. Triggs by acclamation.

The proceedings closed, and the Meeting separated at 10 p.m.



CHURCHES IN NORTHERN FRANCE.

By Sir CHARLES A. NICHOLSON, Bart. [*F.*].

Read before the Birmingham Architectural Association, 11th December 1908.

I PROPOSE to describe some of the peculiarities of church architecture in that part of France which lies nearest to our own shores, to the north of the River Loire, and which includes a part of the old royal domain, together with the provinces of Normandy and Brittany.

The country we now know as France was in the twelfth century divided into several independent or half-independent provinces, and the political unification of France was not completed until long after the time at which the churches we are going to consider were built. The local schools of French architecture are therefore very distinctly divided; and this is especially true of the earlier work, though as the different provinces gradually coalesced into a kingdom the architectural provincialisms by degrees disappear.

The buildings I shall refer to all belong to the period between the twelfth and the seventeenth centuries, and I make no pretence of treating so wide a subject in an exhaustive manner, my object being to record some personal observations and not to compile a regular treatise upon architecture.

All the mediæval styles of architecture are derived from the debased Roman work which prevailed over all western Europe during the first thousand years of our era. In Italy and southern France and Spain this had developed into an ornate and logical architecture. In Saxon England and northern Europe we only find a very homely and rustic version of Romanesque work until the end of the eleventh century. The old "Basse Œuvre" at Beauvais, a very fair specimen of one of these early Romanesque churches in northern France, has no architectural features except plain square piers and round arches and wooden roofs. A fair example of a Romanesque village church of somewhat more ornate character than the "Basse Œuvre" may be seen at Mareuil, near Abbeville, and doubtless the round-

arched styles of northern France had attained a high degree of refinement by the middle of the twelfth century, but so much rebuilding was done after that date that there now remain comparatively few specimens of developed Romanesque work in these districts. In Normandy, however, as afterwards in England, the early invaders rebuilt their churches on a grand scale before the introduction of Gothic architecture, and so Normandy still contains a good deal of advanced pre-Gothic work. It is worth while to compare later developments of Norman architecture on opposite sides of the Channel. Here in England the older native traditions reasserted themselves within a century after the Norman Conquest. In Normandy, on the contrary, the early Gothic work borrows certain English characteristics, but after the thirteenth century is hardly to be distinguished from the work of purely French builders. To the west of Paris there still remain some of the domed and pointed-arch churches of the Angevin type. Such is Notre-Dame de la Couture, at Le Mans; such, too, is the nave of the cathedral there, which, though covered with intersecting vaults, is structurally quite different from the contemporary Gothic work in the Paris district. In the west, as in Normandy, architectural provincialisms to a great extent disappear after the middle of the thirteenth century, such peculiarities as survive being those arising from the nature of the local building stones and from other accidental circumstances. In the remoter districts of northern Brittany there are few traces of an architecture earlier than that of the thirteenth century, though there are exceptions at Dinan and Lanmeur. Here the thirteenth-century work is borrowed

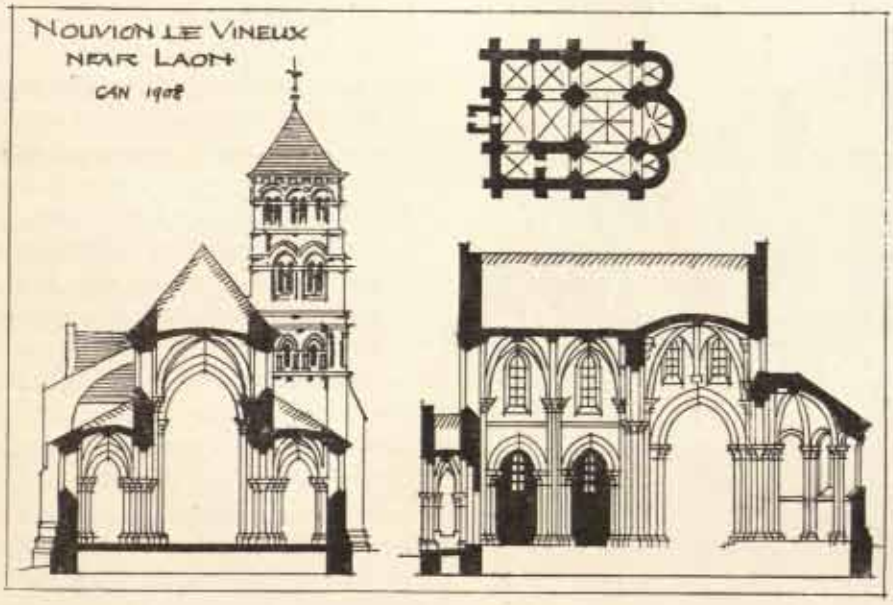


MAREUIL, NEAR ABBEVILLE.
From a sketch by the author.

from that of the Caen district, but a local style grew up during the fourteenth century, and Breton work retained an individuality right up to the time of Louis XIV.

The earliest purely Gothic churches in France belong to the last half of the twelfth century, and the work of this period differs considerably from the developed early French style of the following century. Notre-Dame at Paris is mostly of the earlier style, though it underwent considerable alteration soon after it was built. This church and its history are so well known that they need no description; we will therefore begin our observations in the city of Laon, which is not very far from the German frontier, but still is a thoroughly French town.

The cathedral is of course the dominating building of Laon, but the church of St. Martin is earlier in date, and although of very simple character it is completely Gothic in construction, having a fully developed series of vaults and flying-buttresses. There is a village about five miles from Laon called Nouvion-le-Vineux, and here may be seen, unaltered and unrestored,



a small twelfth-century Gothic church, complete in structure and rich in detail. It is now partly disused, and when I visited it some years ago an impatient sexton prevented me from taking more than a hasty note of its internal design and arrangement. It is a very small cross church, ending in three parallel apses, and vaulted throughout, the crossing bay being very cleverly treated with clerestory windows that give the effect of an open central lantern. There are no triforia, as the scale of the church is so small. The exterior is simple and weatherbeaten, and a tower with coupled roundheaded belfry windows stands on one side of the nave, but the distinctive feature is the delicacy and richness of the internal detail. This belongs to a style of which examples may be seen in all parts of France, and of which the crowning achievement is the western doorway at Chartres. By some authorities this style of ornament has been attributed to an exodus of unemployed Greek sculptors from Constantinople, because the Byzantine form of acanthus is frequently used, and because the figure sculpture is conspicuous for its conventionality and severity. It is of course possible that certain Byzantine artists may have accompanied some of the Crusaders on their return from the wars, and this may account for the simultaneous appearance of the class of work referred to in so many

different places at a time when communications were difficult and when provincial jealousies were rampant. Possibly this little church at Nouvion-le-Vineux, so gracious and peaceful in its present neglected condition, was the votive offering of some pious knight-errant, or a memorial set up by his sorrowing lady. At any rate its plan is both unusual and distinguished, while its fine proportions and rich detail denote its superiority to the ordinary village church, although in this district the country churches are generally of some pretensions.

Laon Cathedral is about contemporary with that of Paris, but has been less altered. It is long and narrow, with square-ended choir and bold transepts, and the plan looks quite English. The interior is four-storied, as was that of Notre-Dame before the thirteenth-century alteration of the clerestory, and the vaults in the nave and choir are sexpartite. The glory of the church is its crowning group of five towers, the western ones having the well-known colossal statues of the draught oxen, set there to remind the people not to boast too rashly of the goodliness of the church they had built. From every point of view and under every condition of atmosphere the exterior of Laon Cathedral is effective. The towers, octagonal in plan above the level of the nave parapet, are full of life and sparkle, being vast compositions of shafts and narrow open arches that contrast effectively with the plain walls and solid buttresses from which they rise. To the east of the church is the thirteenth-century Bishop's Palace, still entire although now used for secular purposes; and on the south side of the nave there is a queer little cloister in a state of picturesque dilapidation.



From Laon we can easily travel to Sens and Soissons. Sens Cathedral is of great interest to Englishmen as being the prototype of the choir of Canterbury. Viollet-le-Duc places its date from 1144 to 1168, whereas the Canterbury rebuilding was begun in 1175. At Sens the high vaults are sexpartite, as at Laon, and in the ground story coupled columns alternate with large clustered piers. The plan of the apse originally resembled that at Canterbury, with a single circular Lady Chapel, just like Becket's Crown. But the general planning of Sens is short and wide and thoroughly French, while Canterbury choir, in which are incorporated the remains of earlier work, is unusually long even for an English church, and possesses, moreover, a second transept.

The transept, the clerestories, and the high vaults at Sens were reconstructed after a fire in the thirteenth century; the Lady Chapel has been rebuilt and chapels added between the nave buttresses. The west front is a jumble of early and later work, and some of the capitals in the porches have delicate classical acanthus. The capitals in the church itself are, however, thoroughly French, with broadly treated foliage having full rounded surfaces as opposed to the flat surfaces and sharp incisions of the Byzantine school. There is a fine bishop's palace

with a restored thirteenth-century hall close by the cathedral at Sens, besides a good deal of other interesting work in and about the city.

Not far from Laon in another direction lies the city of Soissons. Here most of the cathedral is built in well-developed thirteenth-century French Gothic, and whether on account of the extensive restoration, in which the interior has been hopelessly disfigured with hideous pointing, or because of the dull correctness of the design, it is not a very attractive church. But it possesses one entirely satisfactory feature in its apsidal twelfth-century south transept, the vaulting cells of which include, each of them, three bays of the surrounding aisle. The detail of the capitals is extremely refined and well carved, and the vaulting bays of the aisle —which is of two stories, as at Laon – are unusually small and give an effect of great delicacy and intricacy. Moreover this transept, attached to which is a picturesque two-storied round chapel, has escaped the fate of the rest of the church, and, internally, has not been spoilt by restoration. The design of the Soissons transept resembles that of the apse of St. Remy at Rheims, a very old Romanesque church which is now scarcely recognisable as such, owing to the alterations it underwent at successive periods from the twelfth to the sixteenth century. The apse of Notre-Dame at Châlons-sur-Marne, not far from Rheims, is also of almost identical design with the work under consideration. At present, however, we must leave this eastern district to see our next great church, the cathedral at Chartres.



SENS: ACANTHUS CAPITAL, N.-W. DOORWAY.

Of the building which was burnt down in the year 1194 there still remain the crypts, the west doorways, one steeple, and the base of another. The steeple and doorways are masterpieces of masonry. Prior describes the former as a marvel of symmetry and shapeliness. The body of the church is less carefully finished, and the reconstruction of this was finished in 1240. The grand porches of the transepts were added ten or twenty years afterwards, and are among the best works of their age. So at Chartres it is possible to compare some of the best French sculpture of the twelfth century—that of the western doorways—with equally fine work in the transept porches built fifty or sixty years later. The advance is striking, the earlier figures being purely conventional, of exaggerated height and thinness, as if their sculptor had kept in view all the time that the figures he was carving had to serve as columns to carry an arch-moulding, while the later figures, also made to do duty as columns in some cases, are almost naturalistic, though their naturalism is of a severe type. In the somewhat later work of the western doorways at Amiens and Rheims this naturalism is carried further, and it seems to me that the happiest compromise between the ideals of sculpture and architecture was attained in the central figure of the west doorway at Amiens, the well-known "Beau Dieu."

The Rheims figures are perhaps more classical in feeling than those at Amiens, and are a few years later in date: we have little contemporary sculpture in England that can be compared to these figures except on some of the royal tombs at Westminster Abbey. At first,

as we have seen, the sculpture had been entirely subordinated to the architecture, the subject panels being stiff in design and so flat in treatment as to give the impression of incised ornament; while the statues, often used in the place of columns, are cylindrical in general section, the modelling of the human form being only suggested. The style was gradually modified till by the end of the thirteenth century we find subject panels fully modelled in high relief, and statues treated in the round and displaying a perfect appreciation of anatomy in the best examples. The figures no longer do duty as shafts, canopies and pedestals being used so as to partially isolate the statues from the architecture, while the panel subjects are framed in bold mouldings. The foliage carving developed alongside with the sculpture proper, the earlier work being derived either from late Roman ornament or from the incised work of the Byzantine school, while the thirteenth-century ornament generally consists of a conventional foliage broadly treated and boldly modelled, with animal forms freely introduced in the richer examples. Comparing French ornament of the thirteenth century with that of the English school, the essential difference is that the Englishmen had a strong sense of beauty of line and delighted in graceful scrolls and vigorous curves, whereas the French carvers had the greater perception of the effects that could be attained by the skilful modelling of surface.



THE "BEAU DIEU D'AMIENS": FIGURE OF CHRIST ON TRUMEAU OF CENTRAL PORCH.

The English wars and the Black Death checked the development of French architecture and sculpture in the fourteenth century. In the few monuments which date from this period the architecture shows little advance upon that of the thirteenth century, except that the construction is more dexterous in a few of the buildings and the ornament becomes naturalistic. The Madonna of the south porch at Amiens, a work of the fourteenth century, may be compared with the more sober and classical work of the western doorways. She is a pretty figure, dramatic and graceful, but the dignity of the older work has been lost. In like manner the fourteenth-century foliage is carved with botanical exactitude, but is applied to capitals and mouldings with no particular rhyme or reason, whereas in the earlier work the stone seemed to have taken life and sprouted of its own accord.

The revival of the arts in the fifteenth century produced much fine sculpture and ornament, but at this period the sculpture is both subordinate to and independent of the architecture: thus the relief panels are enclosed in elaborate architectural frameworks, and each statue has its own niche, with a canopy of elaborate tabernacle work, while the crinkled

carvings with their deep undercuttings are confined within the formal lines of mouldings, and in many instances recall the wooden cornices of contemporary screenwork in this country, in which the vine ornament is carved on a thin pierced board slipped into grooves in a solid moulded beam.

At Chartres the sculpture of the choir screens is one of the best examples remaining of the late fifteenth and early sixteenth century French sculpture. These screens part off the choir and apse from their aisles, and on the side next the aisle are in perfect condition. The series of panels begins at the south-west corner, where the architectural detail is flamboyant Gothic, and continues round the apse to the north-west pier of the choir, where the detail is almost purely Renaissance. As is the case in most French churches, the rood-loft at Chartres has been destroyed, much to the detriment of the general effect, and the inside of the choir has been plastered all over with horrible stucco clouds and gilded glories, the only merit of which is that they have now become shabby and dirty and are therefore less obtrusive than new white-and-gold altars in modern Parisian Gothic, or shiny alabaster reredoses and brazen screens in the Cockney style, with which so many of our own churches have been "beautified" within the last fifty years. Of course it must also be remembered, in looking at a French church, that the theatrical arrangements of the modern altars and their surroundings are totally foreign to the whole idea of a Gothic interior. Still in these broad and lofty cathedrals, like Chartres, the absence of the rood screens and lofts is certainly not felt to the extent that it is in a long, low English building like Lichfield or Ely or Selby.

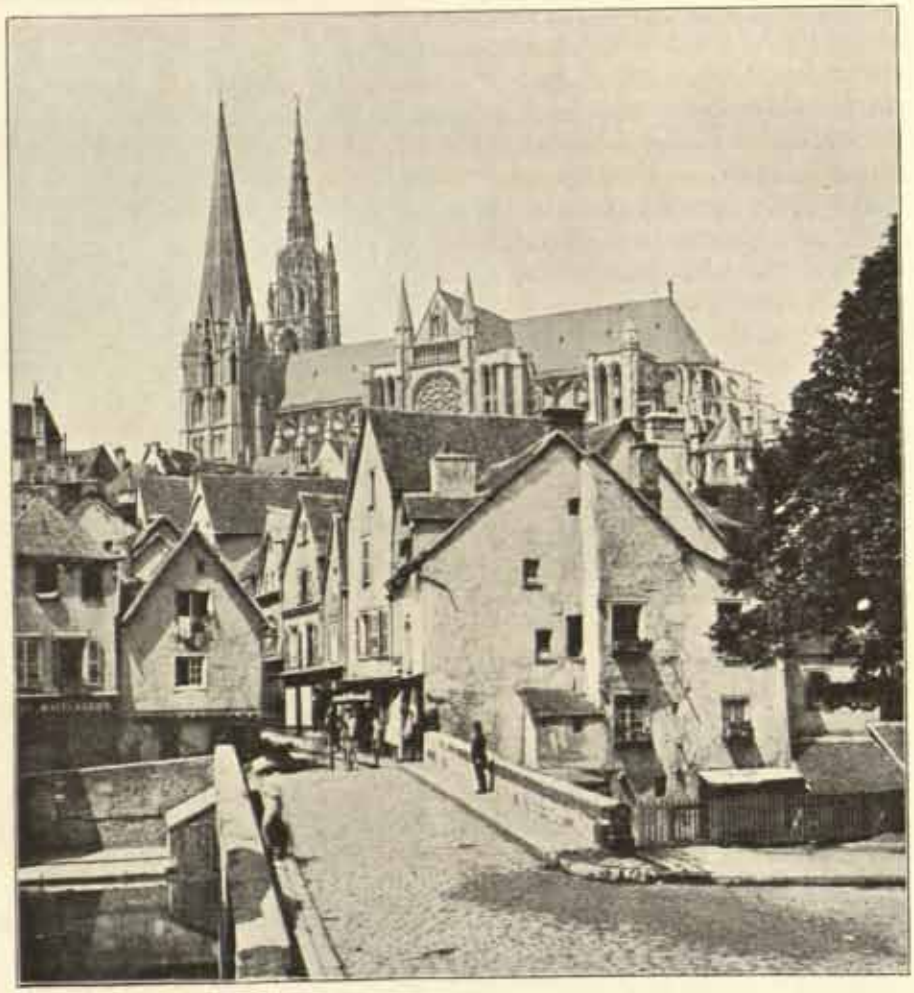


ABBEVILLE: S.-W. DOOR, EXTERIOR.
From a sketch by the author.

As has already been mentioned, the thirteenth-century work at Chartres Cathedral is somewhat deficient in the refinement which is characteristic of the older work at the west end. The southern steeple in particular is an admirable piece of masonry, scientific in design and carefully finished in every part. The spire is a thin shell of stone skilfully weighted at the base, and is thoroughly French in design, the distinctive mark of a truly French spire being the cleverness with which the junction of the octagonal cone with its square tower is masked. Here there is a short octagonal drum with bold gablets breaking up into the sloping spire faces, and there is no parapet to the tower. Norman and Breton spires are of a totally different type which will be described presently.

Though ruder than the earlier work the thirteenth-century portions of Chartres Cathedral are very admirable in themselves. Their builder was perhaps impatient of exact mechanical and geometric rules; thus he set out his apse upon a somewhat haphazard and unsymmetrical plan, and loaded the church with a vault the filling-in of which is double the usual thickness. But he was careful to get his main proportions right, and he certainly succeeded in building an almost indestructible church and one of the most impressive in France.

The greatest treasures of the cathedral are its hundred and fifty windows filled with priceless thirteenth-century glass. One can neither sketch nor measure nor criticise inside Chartres Cathedral; it is just a place to enjoy and to say one's prayers in. The colour of the glass is most daring, the brightest rubies and blues being used, and no doubt some of its extraordinary sparkle is due to age and dirt and accidental breakages, which have been mended with white glass. At any rate some of the windows which have been restored are less



CHARTRES.

harmonious and less brilliant than those which have not undergone that process. The glass in Chartres Cathedral is fully coloured in all parts, without the relief of the grisaille bands or white canopies which were generally used in later work. The clerestory lights contain colossal figures in pairs, of which perhaps the finest are those on the west side of the south transept; these figures are by no means all ecclesiastical in character, several representing knights in armour. The aisle windows are treated with small subject pictures in medallions; of these the finest are in the chapels behind the apse. These little pictures, of which, I suppose, there must be five hundred or more, are of intense interest, and many of them are full of humour, as fresh to-day as it was six centuries ago.

I should like to have the chance of shutting up some of our church building committees in Chartres Cathedral for a week, so that they might see what can be done with fine proportion and good colour. People are so apt to overlook what is after all the primary purpose of a church in a fussy insistence upon details the importance of which it is very easy to overrate.

But though Chartres Cathedral is so essentially a work of art it is by no means an unpractical building on this account. The lighting is sufficient, the acoustics good for so large a church, its interior is warm in winter and cool in summer, the spaces are ample for a large congregation, and the chapels are conveniently planned, so as to provide quiet accommodation for large or small groups of worshippers at the various altars. This condition is effectively fulfilled by the provision of double aisles round the apse, the innermost of which forms a thoroughfare, while the outer one, from which project small apsidal sanctuaries, serves to accommodate the worshippers. This outer aisle, being continuous, allows plenty of room for a good-sized congregation at any one of the chapel altars, and the plan has therefore a practical advantage over that of such an apse as Amiens, in which the chapels are deep and narrow, and there is no room for the congregation to spread itself out to right and left if it happens to be an unusually large one. Before we leave Chartres Cathedral we should look at the picturesque sixteenth-century organ, perched up in the south clerestory, though it must be confessed that the case is the best part of this large instrument.



SAINT-PIERRE, CHARTRES.

Down in the lower part of the city, amongst old thirteenth-century stone houses and later timber ones, is the large church of St. Pierre, with its fine thirteenth-century clerestory built upon a rather older arcade. The architecture here is in strong contrast to the massiveness of the cathedral. It is a daring piece of engineering, carefully built and well finished, with tall and graceful flying-buttresses and enormous windows. The glass is mostly fourteenth-century work, with strong colour alternating with vertical bands of grisaille, which may perhaps have been inserted at a later period than the rest in order to obtain more light in the church. The prevailing colour in the glass is a very fine ruby.

The glass at Rheims Cathedral is rather earlier than that which has just been described, and is perhaps the finest in France. The clerestory and end windows of this great church are in fairly perfect condition, but the aisle windows have been reglazed with white glass. Like that in Chartres Cathedral the Rheims glazing is fully coloured without any grisaille bands or canopy work, but ruby glass is more freely used than at Chartres, and although the individual windows are as fine as possible the whole effect is less satisfactory than at Chartres, on account of the glare from the uncoloured aisle windows. Of Rheims Cathedral itself

nothing can surpass the beauty and compactness of its planning. The original architect, Robert of Coucy, seems to have completed only the lower portions of the church down as far as about the middle of the nave. His work is unusually solid and massive, but his successors, doubtless very anxious to get the church closed in, finished the building in a cheaper style, reducing the scantlings of the buttresses and clerestory above the level of Robert of Coucy's work. Not that they scamped their work at all, for everything is well and handsomely carried out, although on less robust lines than those originally adopted. The internal proportions of Rheims Cathedral, with its steeply pointed vaulting, leave nothing to be desired, but the exterior strikes one as being a little ungainly in outline in spite of the beauty of much of its detail. The sculpture of the west front has already been mentioned as being of the most advanced type of thirteenth-century work. The flying-buttresses of the nave, with their colossal statues of angels under open pinnacles, are masterpieces of design, although it has unfortunately been necessary to restore them extensively in recent years. There is an early Gothic doorway built into the north wall of the cathedral, and the Church of St. Remi, an old Romanesque basilica remodelled in Flamboyant times, has an excellent twelfth-century four-storied choir, which I have previously referred to as being similar to the south transept at Soissons in many of its details.



SAINT-PIERRE, CHARTRES: PANEL OF WEST WINDOW.

I suppose we most of us know the cathedral at Amiens, which, like that at Rheims, is the work of two successive periods; but whereas the break between the new and the old work at Rheims is a horizontal line, at Amiens it is a vertical one. The nave was begun on a great scale early in the thirteenth century, and seems to have been practically finished in about thirty years. Soon afterwards the old choir was rebuilt, but, as at Rheims and many other of the great French churches, the later thirteenth-century work is decidedly inferior in design and execution to that of the early part of the century. A fine scale and proportion mark the work in the nave, and here the ornament and the sculpture are especially bold and masterly. The general proportions of the choir follow those of the earlier work, but here there is a certain meagreness in much of the detail; the window tracery is lean and the traceried flying-buttresses look fussy in comparison with the simpler abutments used in the nave. Moreover these same choir buttresses proved inefficient and had to be strengthened not

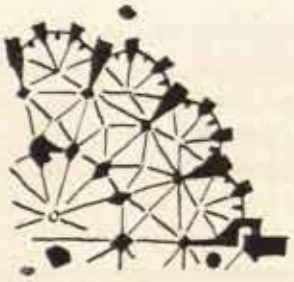
very long after their completion. Amiens Cathedral is not rich in old glass, though there is some fine colour in the great roses and in one or two isolated windows of the aisles, but there is a good mediæval organ at the west end, and a complete set of fifteenth-century canopied stalls in the choir, backed with some delightful coloured stone screenwork, not unlike that round the choir at Chartres.

The parish churches in Amiens are dull, but the neighbourhood is an interesting one, and Beauvais is no great distance off. Here the cathedral choir is the crowning achievement of French Gothic art, and the city is a delightful one, with its numerous mediæval houses and its fine twelfth-century Church of St. Etienne with its large Flamboyant choir.

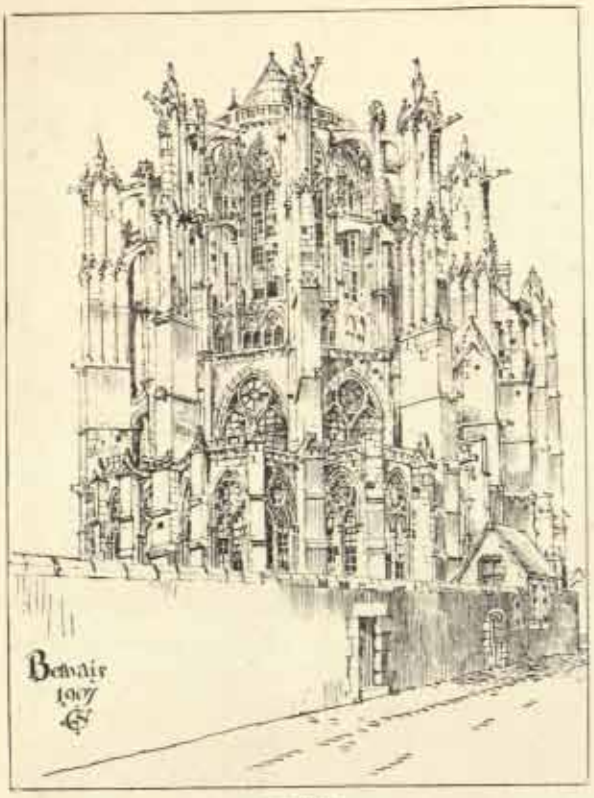


AMIENS CATHEDRAL: WEST FRONT.

The choir of Beauvais exceeds that of Amiens both in span and in height. In plan it is compact and symmetrical. The apsidal chapels are small, low, and uniform; their many angles and buttresses and small projections all contribute to the effect of external height, which is so striking. Above the chapels the aisle wall runs up with large plain windows in each bay, and within the aisle rises the immensely tall clerestory, with its glazed triforia underneath. The flying-buttresses spring from narrow deep abutments decorated with shafts and arcades, and rising sheer up from the ground to the full height of the clerestory. Internally the effect of the apse, with ring above ring of graceful windows, is that of a vast enclosed space full of light and atmosphere, such as it would be difficult to match elsewhere, although in our own country the broad lanterns of York Minster and Ely Cathedral produce a somewhat similar impression. The construction at Beauvais is daring and scientific, but has partially failed, owing to the use of defective material. Still the way in which the thrusts are partially neutralised by an ingenious method of corbelling out the intermediate pinnacles of the buttresses is most interesting; upon this question, however, I will only say that a masterly analysis of the whole structure of Beauvais choir will be found in Viollet-le-Duc's *Dictionnaire*.



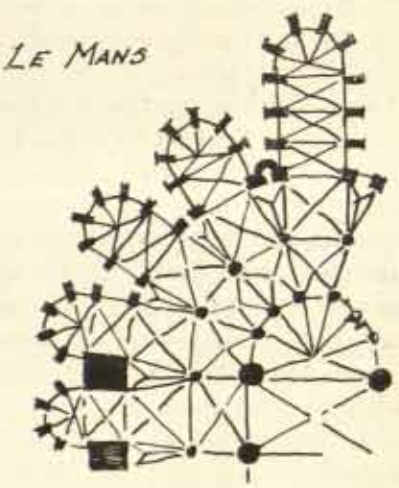
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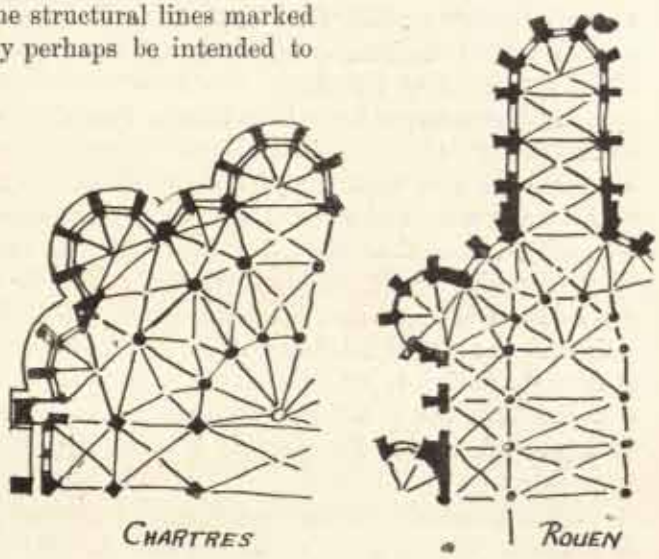
The history of the church has been a long chapter of accidents. Some of the flying-buttresses failed in the fourteenth century, and by way of remedy intermediate piers were built between the original ones, and thus each wide bay of the straight part of the choir was converted into two narrow ones. Therefore the pillars are now unusually thickly set and tall in proportion to the arches, and the effect of the ground story is that of a colonnade rather than an arcade. Ribs rising from the intermediate piers were added to the vaulting, which was wholly or partially rebuilt and converted from quadripartite to sexpartite form. At a later date the transept was finished on a grand scale, and a central steeple was built early in the sixteenth century, only to tumble down in a few years' time, while the nave was never built at all. The critics have often scoffed at the misfortunes of Beauvais Cathedral, yet it has stood some six centuries, and still fulfils its original purpose—and where are the gods of Charing Cross Station or the Wembley Tower to-day? Barring accidents or violence, there seems no reason to doubt that this masterpiece of an unknown artist, raised with slender resources and in the face of great mechanical difficulties, will dominate the city of Beauvais when Yankee skyscrapers are a forgotten nightmare and the Tower Bridge has been consigned to the scrap-heap. Perhaps, if the building had ever been finished, much of its special charm would be lost; its very incompleteness leaves something for the imagination to supply, whereas one often finds that magnificent architectural conceptions, like Cologne and Salisbury, produce a somewhat irritating effect when completed in every detail.

The design of the choir of Beauvais is very much superior to that of many other contemporary works—for example, to that of the cathedral of Le Mans, a city situated on the border of the province of Brittany. Here the choir resembles that at Beauvais in general dimensions, but its plan is positively ugly, with a ring of deep, isolated chapels round the apse. The flying-buttresses here bifurcate from their intermediate pinnacles and in plan resemble the letter Y. This arrangement gives a very confused exterior, which contrasts unfavourably with the grand simplicity of Beauvais, and the deep chapels at Le Mans cause the whole clerestory of the apse to appear buried and lost amongst its accessory buildings and its structural supports.



APSE, LE MANS.

The neighbouring cathedral at Sées, in the Norman province, is interesting as an illustration of the provincial as compared with the French school of Gothic. The nave here is the earliest portion and belongs to the Norman school, with circular abaci and moderate-sized windows, and the structural lines marked with deeply undercut shafting which may perhaps be intended to emulate the Purbeck marble-work in our own English thirteenth-century churches. The choir, on the other hand, is a stone skeleton in purely French style, the wall surfaces being as far as possible suppressed, the triforia glazed, and the provincial detail of the nave avoided throughout.



Owing to bad foundations and excessive slightness of construction this choir has given a good deal of trouble and has undergone a somewhat Grimthorpean restoration, which has left little more than a bare record of the general ideas of the fourteenth-century builders. The nave is now undergoing a somewhat similar process, the necessity for which is not very apparent. The outside of Sées Cathedral is very ungainly; it has two west spires contemporary with the choir, and, like it, of French type. These have been strengthened with buttresses of about 30 feet projection. Below are the remains of fine open porches of Normandy Gothic character, which are something like the porches at St. Albans. The interior is finely proportioned; and the original glass, though much restored, remains throughout the choir and transepts. Its design consists of very small figure subjects under canopies on a field of grisaille work very similar to the glass in the Latin Chapel at the Cathedral of Oxford.



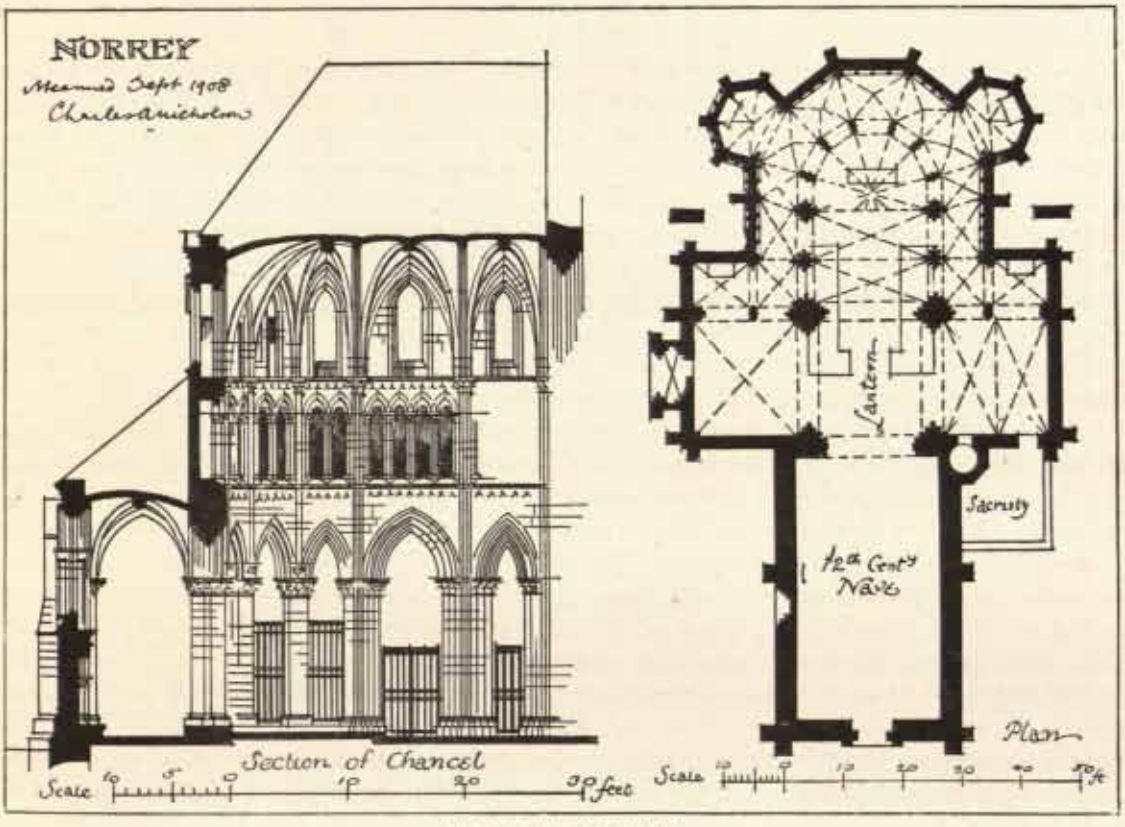
Sées is on the southern border of Normandy, and here we find work of provincial type side by side with almost contemporary work of the purely French school. But at Caen, Bayeux, and Coutances the Norman influences altogether overshadow the French. In the Diocese of Rouen the architecture is a compromise between the two schools, the general planning being Norman but much of the detail purely French. At Lisieux the same thing may be observed, and both here and at Rouen the thirteenth-century work is more provincial in general character than is that of the preceding period.

The usual plan of the early Gothic churches of Normandy almost always provides for a tall central lantern. Naves are longer and narrower than in the French provinces; apses are usually planned with three isolated circular chapels, like those at Gloucester and Norwich, instead of with continuous rings of chapels such as we find at Chartres or Beauvais; undercut shafts and mouldings, plate tracery panels, circular abaci with poorly carved foliage, are freely used.

The high vaults of large Norman apses often show a curious local feature in the shape of short ribs radiating westwards from the central keystone and abutting in a desultory fashion against the easternmost transverse rib of the choir vault. The Abbaye-aux-Hommes at Caen and the Cathedrals of Bayeux and Coutances possess rings of chapels round their apses in the French manner, but in all three cases the parapets of these chapels are combined by means of corbelling into an unbroken circular sweep. Again, these Normandy apses almost always have bold turrets ranged in a line across the chord of the apse, two to the aisles and two to the clerestory, and in several instances the apse has no flying-buttresses, though these are provided to the straight vaults of the choir. It is interesting to compare the choirs of Bayeux and the Abbaye-aux-Hommes. At the latter the bulk of the old early Norman church remains, and only the choir was rebuilt in the thirteenth century. Here, accordingly, round arches are freely used in the thirteenth-century work, and the proportions are brought into accordance with those of the older building. But at Bayeux the cathedral was rebuilt entirely, excepting the western towers and the pier arches of the nave; so here the design is bolder and the work apparently of more advanced character than that at Caen. The thirteenth-century clerestory of Bayeux nave is extremely fine in design, consisting of tall and richly moulded coupled lancets, the triforium stage being reduced to a mere balcony.

In order to see thirteenth-century Norman architecture at its best one ought certainly to visit the village church of Norrey, a short distance out of Caen on the Bayeux road. The choir and crossing here are of cathedral design, although carried out on an extremely small scale, and the proportions are of such excellence that the diminutiveness of the church is not perceptible. The actual measurements are astonishing; the total height is only 40 feet, the clear width of the choir 18 feet, and several of the pier arches only 3 feet 6 inches clear span, though the pillars and walls are of fairly substantial scantlings. The architectural detail and planning have the provincial peculiarities already mentioned as occurring in this part of Normandy; the detail is unusually rich and highly finished; stringcourses carved with vines and hops, varied with birds and beasts and little figures, among which is a series of groups illustrating the Massacre of the Innocents, form the cornice to a very rich wall arcade. The mouldings generally are deep and bold, and richly carved pateræ decorate the arch spandrels. The two chapels of the apse have pyramidal stone roofs, which were copied in the south-eastern chapel of Chester Cathedral when that building was remodelled in the Victorian Gothic style of the nineteenth century. Norrey Church has been extensively restored outside, except in the case of the north transept and its very beautiful porch, and the low and simple early Gothic nave. The general grouping is very striking, and the steeple is a good example of the Caen type. A buttressed basement—in this example forming a lantern, as the steeple is a central one—is divided from the belfry by a small but distinctly marked stringcourse. The belfry itself is tall and unbuttressed, and has two tall windows and two narrow blank arches on each face, and this stage finishes with a bold cornice and open balustrade. The spire, pierced at intervals with quatrefoil and other simple devices, ribbed at each angle and cut into scale work, rises within the parapet and has open-work pinnacles at the four corners and large dormers at the base on the four cardinal faces. Norrey spire is truncated and ends in a slated extinguisher, otherwise it is a complete specimen of its kind; one finds steeples of practically identical design with this all over the north-western provinces of France, from Lisieux in the east of Normandy to St. Pol de Léon in Finisterre. One seldom finds village churches planned in the ambitious style of Norrey. More often in the north of France they are quite homely and unpretending buildings, and towers are by no means so universally used as in England, although in

the wealthier districts it is not uncommon to find country churches entirely or partially vaulted. In the west of Brittany a few of the earlier churches—those of the twelfth century, that is to say—are barrel-vaulted, but here in the later styles the ceilings are usually of timber. Early pointed barrel-vaults occur over the unaisled nave and transept of an old church at Lanmeur, near Morlaix, and the architectural detail here is reminiscent of Celtic art. But this native tradition in Brittany disappeared after the thirteenth century, when the influence of the Norman school of masonry made itself felt. Thus at Dol Cathedral, the planning of which with its square choir is Breton, or perhaps British, the detail is purely



VILLAGE CHURCH OF NORREY.

Norman, like that used at Caen and Coutances. Again, at Pol de St. Léon the cathedral nave and west steeples and the larger and more important steeple of the Kreisker are in no way distinguishable from contemporary work in Normandy.

The Diocese of Rouen is the eastern frontier of the architectural province of Normandy, of which Caen is the capital. Thus the detail of Rouen Cathedral is on the whole French, although the planning is thoroughly Norman, with isolated round chapels off the apse, deep transepts, imposing central lantern, and western steeples practically divided off from the church with solid walling. The two-storied pier arches of the nave of this church are a puzzling feature, the purpose of which is not at all evident, since the aisles show no signs of having been designed in two stories, as was the case at Laon or Paris. Perhaps the builders may have aimed at getting the effect of a four-storied nave without the expense of a double tier of aisle vaults. Perhaps, again, the lower arches may have been designed as struts between the

tall pillars, or maybe it was considered necessary to provide a gallery at the height of the lowest arches for the purpose of dressing the interior or some kindred object. At any rate the platforms on top of the arches are all provided with means of access, little galleries being formed round the nave piers and carried upon a quaint arrangement of shafts corbelled out on the side facing the aisles.

The fourteenth-century transept fronts at Rouen Cathedral are among the best works of their period, and the sculpture of their doorways, consisting of large statues in niches and a great number of small subjects in medallions, is finely and boldly treated, although the figures do not possess the grand classical air of those at Rheims or the simplicity of the Amiens statuary, and may be classed as early specimens of the later French school of Gothic sculpture.

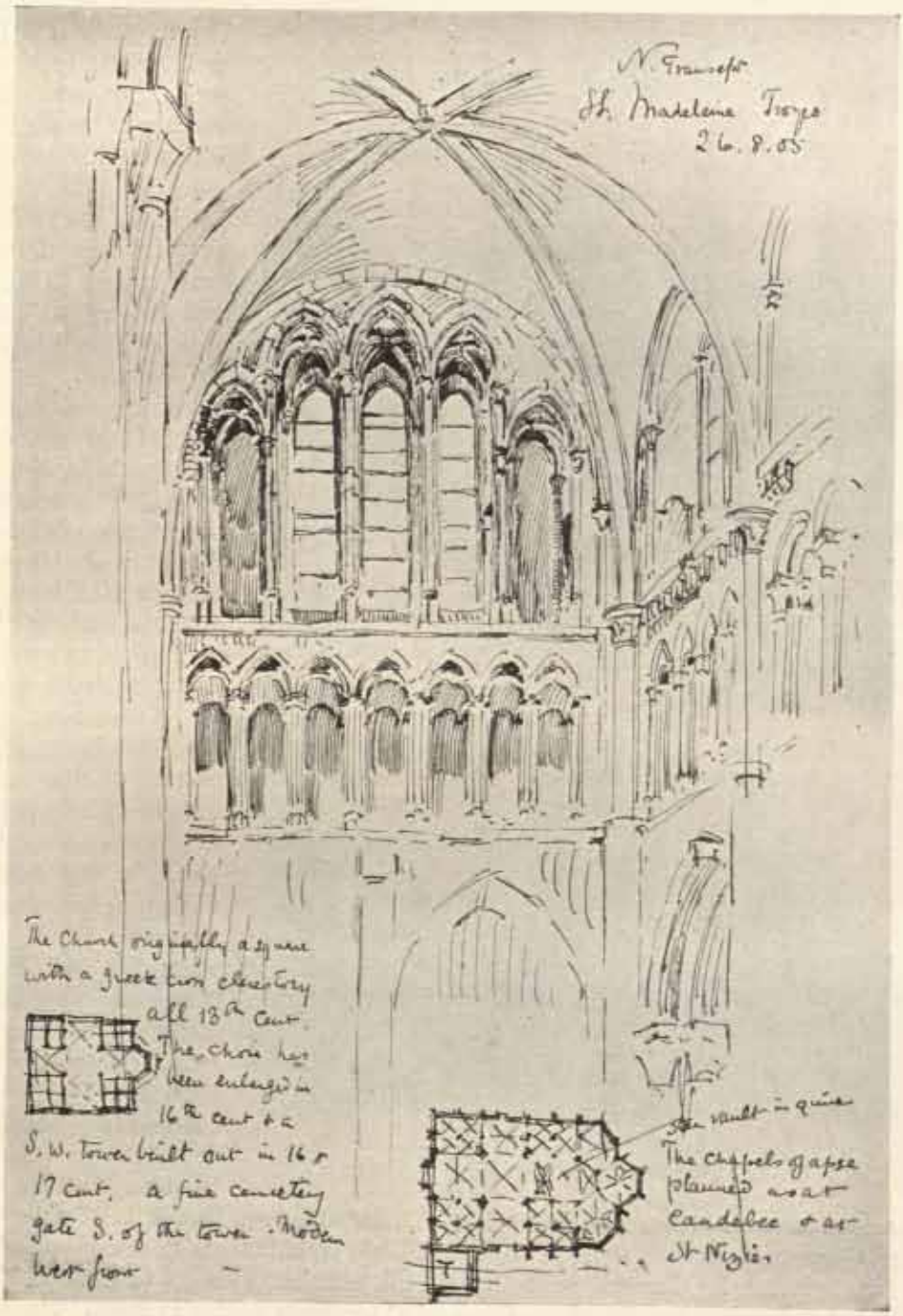
Rouen Cathedral, with its wonderful Flamboyant west front, its fanciful towers, its fine old glass of every period, and its beautiful fourteenth-century cloisters and important accessory buildings, is altogether different from the general run of large French cathedrals, where the original design has usually been wholly or in part carried out without much apparent modification. It is like an English church in this respect, but, unlike most English churches, its external grouping is rather desultory and straggling. Such a church is not seen at its best in a distant view, but down in the narrow streets of the city it forms a delightful series of architectural pictures, the best of which is perhaps to be found at the south-east corner, where one gets the Lady Chapel with its lead Madonna on the roof in the foreground, the twelfth-century apse with its round chapel and sacristy in the middle distance, and the fourteenth-century transept in the background.

The rival Church of St. Ouen is in complete contrast to the cathedral; its graceful fourteenth-century choir and Flamboyant nave and lantern are very compact and beautiful in their own way, but they do not seem to belong body and soul to the city in the same way as does the cathedral. Both churches have suffered from the zeal of nineteenth-century restorers, and it is difficult to say whether the cast-iron spire of the cathedral is a more unfortunate production than the smart Parisian west front of St. Ouen's church. The only Norman peculiarity in St. Ouen's is the importance of its central steeple, the planning being otherwise of the usual French type, as is also the architectural detail.

Of the score or more of parish churches in Rouen the most ambitious, such as St. Maclou and St. Vincent, have Flamboyant central lanterns and tall, narrow, vaulted interiors with chapels round their apses. Others of the parish churches are of homelier design, with low timber-ceiled naves, and, in one of the most attractive of all, an imposing vaulted Renaissance choir has been tacked on to a quaint little Gothic nave with a slated belfry. Here at Rouen one can study Flamboyant buildings and late Gothic glass to one's heart's content, but the delights of the place are not such as can well be catalogued.

French Flamboyant architecture passed imperceptibly into the Renaissance style of the sixteenth century as used in church work. In Paris the churches of this late period, such as those of St. Etienne du Mont and St. Eustache, contain a good deal of classic detail, though nothing like the amount of classical feeling which is found in contemporary civil buildings. In the provinces the early post-Reformation churches are almost purely Gothic as a general rule, and the city of Troyes is rich in work of this description. In parts of Normandy the early Renaissance work is more classical than that at Troyes. At Evreux, for instance, the west towers of the cathedral are of heavy and clumsy classic character, and the nave of St. Taurin's church has a queer Doric triforium underneath its Flamboyant clerestory and vaulting. Evreux Cathedral itself is mostly Decorated and Flamboyant work, with twelfth-century round arches in the ground story of the nave. It is famous for its glass and for the

series of Gothic and Renaissance screens which enclose all its chapels. Also it possesses an old leaded steeple on the crossing, and there is another charming lead pinnacle upon the top of the detached octagonal city belfry.



ST. MADELEINE, TROYES: N. TRANSEPT.
From sketches by the author.

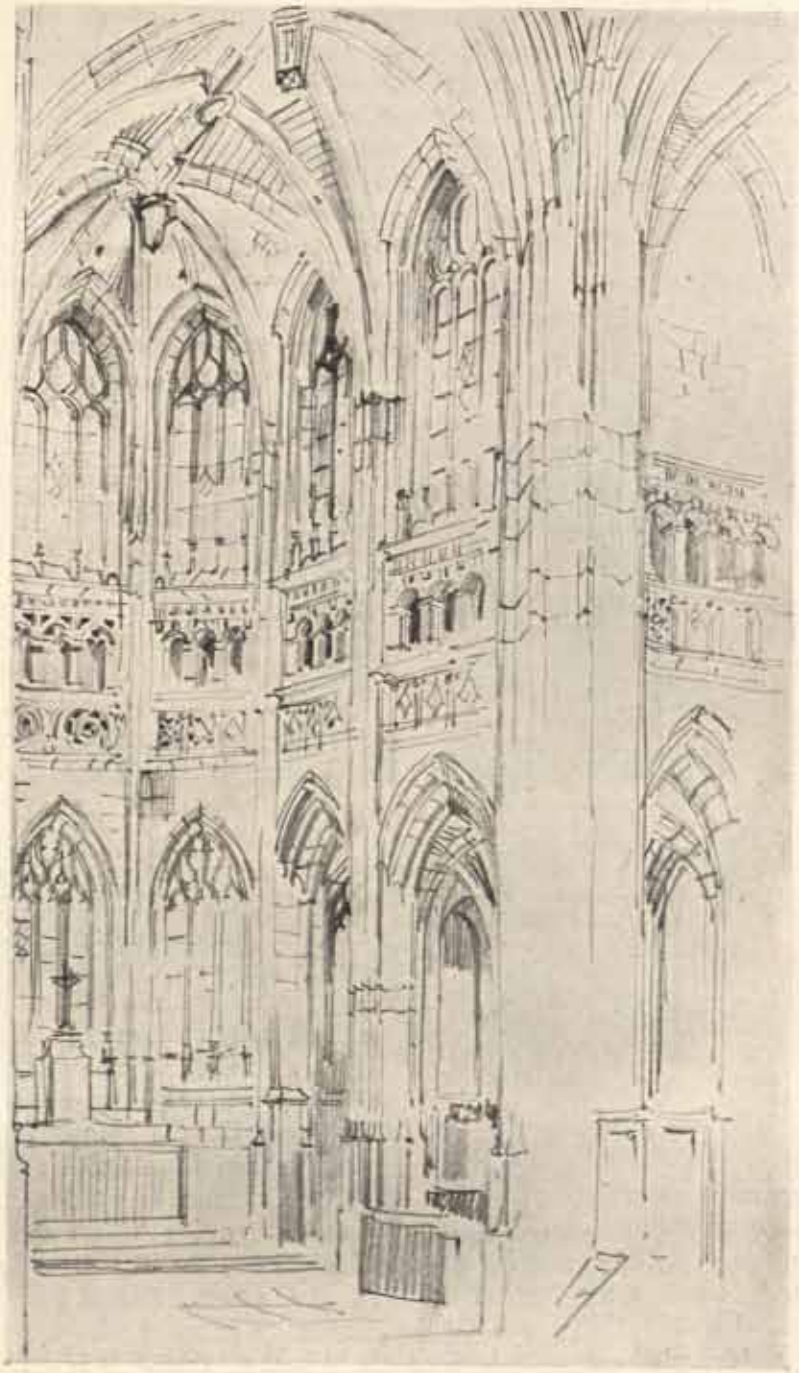
As at Evreux, so too at Caen, there existed in the sixteenth century an advanced school of Renaissance architecture, the leaders of which were a family of architects named Sohier. The works of the Sohier school are marked by the use of wide roundheaded windows and of pinnacles and ornaments in the form of candelabra. The vaults alone retain any considerable amount of Gothic feeling, but they are of a fanciful and corrupt type, characterised by enormous pendants and other conceits which serve no useful purpose and are not very beautiful. The Sohiers built the east end of the great town church of St. Pierre and the northern half of the smaller church now called St. Sauveur. At Gisors, again, we find the work of another family of builders, the Grappins, the first of whom built the nave of the church there in late Flamboyant, while his grandson finished the western towers after the manner of Vitruvius as understood at the end of the sixteenth century.



SAINT-GERMAIN, ARGENTAN : N. PORCH.
From a sketch by the author.

As we have seen, the great provincial schools of building gradually lost their individuality in France, but local mannerisms still survived in and around the various cathedral and market towns. Thus, at a time when the architecture of Normandy was not to be distinguished from that of central France, cities like Caen and Troyes were the centres of small local schools of architecture of their own. Of these small local schools there is a good example at Argentan, near Sées. Here the great church is Flamboyant, but the choir clerestory is without tracery, and little Ionic capitals make their appearance on the eastern vaulting shafts. Norman tradition was still sufficiently strong to demand a central lantern, but the planning has the unusual feature of transepts ending in apses. The choir has been enlarged with a ring of intercommunicating chapels outside the original ambulatory, and

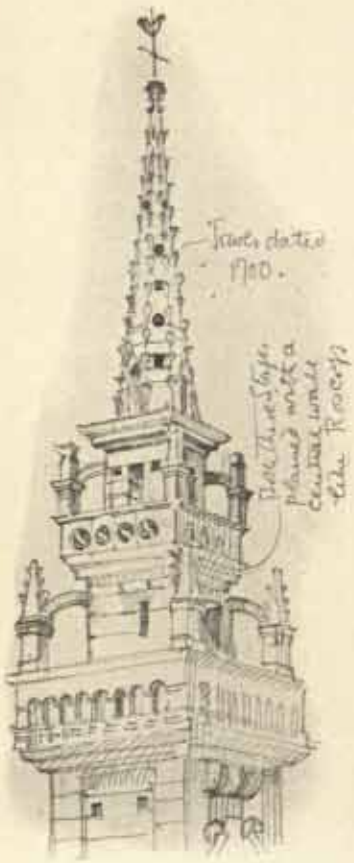
these are in a rude version of Caen Renaissance, adorned with miniature classical columns in several tiers, and having wide, roundheaded windows without traceries, but nevertheless finished with semi-Gothic vaulting, and, stranger still, with perfectly useless flying-buttresses set up for no structural purpose, but because the builders still liked the look of such features. The north-west tower was afterwards finished with a really fine Renaissance lantern and dome in which no trace of Gothic detail is found. The smaller Church of St. Martin at Argentan shows its designer's individuality in the original treatment of its octagonal tower and in the clever vaulting of the ambulatory round its apse, where the awkwardness of the radiating bays is got over by dividing the vault up into alternate triangles and parallelograms. The detail of St. Martin's is Gothic except in the triforium, which is like that at St. Taurin's at Evreux. There is excellent late glass with fully coloured pictures occupying the entire windows in lordly disregard of their mullions and traceries. The small market town of Ecouché, a few miles off, has an unimportant fifteenth-century church with wooden ceilings and no clerestory. To this, in the sixteenth century, some builder from Argentan added a lofty choir and transept with vaulting and clerestories.



ÉCOUCHÉ, NEAR ARGENTAN.
From a sketch by the author.

The triapsidal plan of this is borrowed from the large church at Argentan, and the design of the triforium from that at St. Martin's. The purely Gothic vault of the transept bears a painted inscription recording its date, which is well on in the seventeenth century. Instances of the late survival of Gothic traditions in French church-building are very common—as, for example, in the two large churches at Dieppe, and that at Arques, the cathedral at Orleans, and the churches at Montargis and Troyes.

We have alluded to some of the earlier churches of Brittany and to the thirteenth-century work there, in which Norman influences are so apparent. But during the fourteenth and following centuries, Breton architecture developed a tradition native to the province. This is very evident in the principal church at Lamballe, where the nave belongs to the Norman school of the thirteenth century, and the more recent choir is of purely Breton character. To begin with, it is square-ended, with a large east window; in the second place, it is lined with a skin of Gothic panelling which recalls the choir of Gloucester Cathedral; and lastly, there is a certain crudeness about the detail which it is not at all easy to describe. This church is grandly placed on a steep ridge of rock something like the hill on which Laon stands; it contains some fragments of a Flamboyant wooden rood-loft and a Renaissance organ. Even as far west as St. Pol de Léon we have seen that Norman influences prevailed in the thirteenth-century work of the cathedral nave and the steeples which are so famous, but here also the later work is purely Breton and of a style in which some writers have traced English characteristics. The points of resemblance with English work are somewhat superficial, however. It is true that square-ended chancels with large east windows are the rule in Brittany, but it would be difficult to trace English influence in the design of such churches as that of St. Jean du Doigt, with its tall, narrow interior and enormously lofty columns. There is, however, a certain rusticity about many Brittany churches which recalls the homeliness of some of the work in the West of England. The most characteristic monuments of Brittany are the village churches, sometimes large and handsome, like Le Folgoet, often quite small and low, but with occasional touches of interesting design in the treatment of chantries or porches or dormer-windows, like those in a little church at Mespaul, near St. Pol de Léon. The district is also very rich in the smaller kind of monuments; such are the open-air oratories and wayside crosses, the churchyard gates and the sacred wells, and, of course, the famous Calvaries of the west. Lastly, there are the seventeenth-century steeples, built in pagoda fashion, generally adorned with bas-reliefs of ships, and always provided with gargoyles in the form of gun muzzles. It is not unreasonable to suppose that these oriental-looking steeples were built by the old-time merchant skippers who had made successful voyages to the Indies and had come home to end their days in peace, for the Bretons have always been *par excellence* a seafaring people. One may picture to oneself some old salt, now acknowledged as the village oracle and likely enough invested with all



PLOUGOULM.
From a sketch by the author.

the dignities of a churchwarden, producing for the edification of the village mason his own crabbed sketches of some mosque or temple that had served him as a sailing mark when making for his moorings in an outlandish harbour, and can imagine the old man's pride and contentment when at length the scaffolds had been struck and the memorial of his adventures showed trim and shipshape in all the bravery of its new granite masonry.

Thus ends our hasty survey of some of the Gothic churches in the North of France, a district where one may find the first beginnings of Gothic architecture, and some of the latest examples of the period of its decadence, as well as the most famous masterpieces of the age of its perfection. And if we have been over well-trodden ground, perhaps these notes may serve to remind us of pleasant days we have spent in pleasant places, although they may not embody any new theories or discoveries upon a subject which has been ably and exhaustively treated of by many learned and able writers upon matters architectural.



Barbery St-Sulpice
near Troyes

TOWN PLANNING.

PAPERS COLLECTED BY THE R.I.B.A. TOWN PLANNING COMMITTEE.

VII.—EXTRACTS FROM CHAPTER VIII. OF "THE MISTRESS ART."*

COMMUNICATED BY THE AUTHOR.

No modern nation has approached the French in their capacity for handling large design; not only the design of monumental buildings but also the problem of their placing in relation to other buildings. English architects, or perhaps it would be fairer to say the English public, have been satisfied if the building, the group of sculpture, or whatever it is, is good in itself; the effect it may have on its surroundings, or the surrounding buildings on it, has seldom been sufficiently considered, with the result that many admirable buildings lose much of their quality; and, with the exception of Bath, we have not in this country a single important city, or even a large part of one, laid out on a consecutive and dignified scheme, in which due consideration has been given to open spaces, street perspective, and the linking-up of monuments. To a well-trained Frenchman such a habit of mind would be inconceivable. Under such circumstances he would feel that the design of the building itself was only half the battle, and there would still remain the difficult problem of its placing, its scale and proportion in relation to its surroundings, and lastly the approaches and surroundings themselves. . . . Nor am I referring only to such cities as Paris, with its splendid vista through the Place de la Concorde and across the river, or to that magnificent series of gardens and avenues from the Louvre to the Arc de Triomphe. The same consciousness of the full possibilities of site and building is to be found in provincial towns. The bridge has its open spaces at either end, flanked by notable buildings; the town hall has its ample square. Limes and planes, in serried ranks, shade the open spaces, or carry the line of the main thoroughfares far out into the country. At Avallon, for example, a little town of some 6,000 people, there is a "place" that would dignify any capital in Europe. The Place Vauban is of great size, and the ground falls sharply from the upper end. Right down the middle of this "place" the designer formed two plateaux, held up by high retaining walls of masonry. These are planted with rows of limes on either side of the broad central path which runs from end to end, only arrested by the flight of steps which leads from the upper to the lower plateau, and terminating in another flight of steps to the "place" at the lower end. The effect of these masses of clipped foliage rising above the battered walls against the skyline and the contrast with the surrounding buildings is one not to be forgotten. Only a great and gallant tradition could produce such an effect by such simple means. There is here no straining after picturesqueness, none of that prodigality in sculpture which makes certain Italian gardens almost vulgar in their exuberance, none of that fatuous restlessness which induces the landscape gardener to twist his paths and torment the ground with shrubs and beds in meaningless confusion. The "place" at Avallon has the quality of all great architecture, in that it is the simplest and most direct expression of a fine idea, and is penetrated throughout by the sense of scale. The nineteenth century was disastrous to this great tradition in France, as in other countries, but even now there is scarcely an old town in France that does not show this care and consideration for the aspect of the city as a whole.

Out of the abundance of instances to be found in France, I shall select two: one, a small country town laid out entirely afresh about the year 1635; the other, a large remodelling of an important city in the eighteenth century.

Ten miles south of Chinon, in an out-of-the-way corner of the province of Indre et Eure, there was in the seventeenth century a little village named Richelieu, which might have remained in merited obscurity except that it belonged to Armand Duplessis, the great Cardinal Richelieu. But the Cardinal was determined that it should be converted into a town worthy of belonging to the first statesman of France. Accordingly, while building his own great house, he resolved to rebuild the village, and commissioned his architect, Lemercier, to prepare plans for an entirely new model town. The site was cleared and the plans carried out in their entirety, and as the place was utterly out of the way, and has declined steadily ever since, we have here an example of town planning, as handled in the seventeenth century, which is absolutely unique, in that it was all carried out at the time, and has never been altered since to any appreciable extent. . . .†

Lemercier's work at Richelieu is of peculiar interest, because it is an early instance of those immense schemes of ground treatment to which the ablest French designers were to devote themselves for the next hundred years. It is not too much to say that the French revolutionised the ideas of the civilised world in regard to the designing of grounds, and, later on, in the laying out of the great spaces of cities. Ground design in this sense is in the main the creation of the French. No doubt in its early days it was stimulated by the Italian gardens;

* By Professor Reginald Blomfield. Published by Edward Arnold.

† I do not know of any plan of Richelieu. My notes were made on the spot; and though the dimensions given in *The Mistress Art* were taken by myself I had no opportunity of plotting it out. An excellent opportunity for some young architect to go and measure this up.—R. B.

but the physical and climatic conditions of Italy were not to be had in France, and the French designers very soon struck out a line of their own. They did for the plain what the Italian had done for the hills. The process of development can be traced even in such an early work as Du Cerceau's *Les Plus Excellents Bastiments*. When George of Amboise built his great house at Gaillon he was content with a small garden within the castle walls, a garden not very different from those of *The Romance of the Rose*. But sixty years later, when the design of Charleval was made, the garden has grown to a huge extent, 600 yards by 360, and Du Cerceau calls attention to its amenities, its relation to the house and the park. Designers were already conscious of possibilities in grounds and gardens beyond the mere growing of flowers and shrubs, and De l'Orme's great scheme for the Tuileries marks the advance that had been made in consecutive planning since the early days of the sixteenth century. . . .*

Considering his wide-world celebrity, it is remarkable how little is known of Lenôtre. His method and system is given in that famous book *The Theory and Practice of Gardening*, which became the textbook of design throughout Europe for the first half of the eighteenth century; but of the man himself we know next to nothing. . . .†

When Lenôtre died, in 1700, he had established a standard and a tradition of ground design that was accepted as a matter of course in every civilised country of Europe. Moreover, he left behind him a school of designers fully capable of carrying on his tradition, not only in France, but in almost every part of Europe. As late as 1752, when Blondel published his great book on architecture, he was still able to refer to Lenôtre with unstinted admiration for his genius, and to treat the designing of grounds as an essential part of architecture. It was reserved for our country to replace this great tradition with the ridiculous fancies of the landscape gardener.

Thus, in the middle of the eighteenth century, French architects had definite principles to guide them in dealing with the multifarious problems involved in laying out a city. They were habituated by their training to consider the whole as greater than the part, they had learnt from the first to consider buildings not as units, but as parts of a larger scheme, they were trained in the faculty of realising in imagination vast perspectives, the blocking out of great masses of building and their linking up in consecutive design. What is most impressive in the French gardens of the time of Louis XIV. is not so much their details, beautiful though they often are, but their instinct for scale, and the organic relationship that holds together every part. The central idea of these gardens is usually very simple. At Versailles (though this is not a particularly successful instance), the dominating idea is that of an enormous vista stretching away into infinite space from the steps in front of the palace, and flanked on either side by masses of trees within which are placed fountains, theatres, groups of sculpture and other details, so arranged that they do not interfere with the central conception. The same simplicity of motive is shown in the placing of the Eau des Suisses in relation to the colossal orangery; the effect here is got by great size and by the most audacious blocking out of ground and building. The terrace of St. Germain is another instance of this monumental manner of design; or the canal at Tanlay, or the superb water garden that Lenôtre designed in 1665 for the great Condé at Chantilly, a much finer example than Versailles. In all this work the conspicuous features are the power of selection and the feeling for scale which enabled the French designers to get such noble effects by the simplest means. One has to admit that those means were also costly to an almost prohibitive degree. No one but Louis XIV. could have built the terrace of St. Germain, two miles long and seventy yards broad, or the prodigious aqueduct of Maintenon, or spent the millions lavished on Versailles; but the point of view has changed. Two hundred years ago the laymen still valued architecture enough to think it worth a sacrifice, and the architects were still men who were capable of great ideas, strong enough to turn their back on trivialities of design and to depend for their effect on the genuine qualities of architecture.

Down to the end of the seventeenth century, and with the exception of Richelieu's memorable undertaking, these qualities found their scope mainly in the design of grounds and gardens. It was realised that the house or the building could not stand by itself, but must be considered in relation to its surroundings. The next step was to treat houses and buildings as details of a comprehensive design, and during the first half of the eighteenth century some very beautiful "places" in the larger French cities were the result. The Place Vendôme was designed by Jules Hardouin Mansard. The Place Royale at Bordeaux was built from the designs of the two Gabriels, 1733–1749. The Place du Palais at Rennes (a square of a hundred paces, as at Richelieu) was completed in 1743 from designs by Gabriel the younger, and the square at Rheims before 1760. Designs for public squares in several other towns were prepared but not carried out. Nancy, however, stands alone among the famous examples of city planning, in that not only is there a great square with its approaches carefully studied, but this itself is only part of a much larger scheme. . . .

Among the artists employed by Stanislas, the chief credit of the work rests with two men, Em-

* The advance I refer to here is only in the sixteenth century. It was carried further in the first half of the seventeenth century, but the real revolution in big planning comes with the men of Louis XIV.—R. B.

† What I have to say on Lenôtre is not yet ready.—R. B

manuel Héré, his architect, and that most astonishing smith Lamour. . . .

The space to be dealt with lay between the old town and the new, a space already partly occupied by buildings, but arranged on no system, and actually waste ground next the fortification of the old town. This space Héré cleared entirely. Beginning from the south side—that is, the side nearest the new town—he began with the main square, the Place Stanislas. This was intended to be the centre point of the united city, and was so arranged that the main thoroughfare, east and west, passed through it, running in a straight line across the city, from gate to gate of the outer walls. The whole of the south side is occupied by the Hôtel de Ville. . . .

On the east and west sides of the square are two blocks of buildings ranging from the Town Hall, but designed as separate hotels, each block complete in itself. On the fourth, that is, the north, side the buildings are kept down to a ground story surmounted by a balustrade. Mr. Hallays, the author of a monograph on Nancy, suggests that the motive for this was light and air; but the square measures about 350 feet by 430 feet, and would have had plenty of light and air in any case; and I think myself that Héré had in his mind the triumphal arch which was to mark the junction of the old town and the new. If he had built this side the full height of the rest of the square, the difficulty would have been where to stop it in the short length of broad roadway leading from the square to the arch. He boldly cut the knot by keeping the whole of this side of the square down to a height which could be carried along this roadway up to the triumphal arch, enhancing instead of dwarfing the scale of the archway. He was enabled to do this by another very original piece of planning; instead of closing the four angles of the square he stopped his buildings short of the angles, and left it to Lamour to finish them with his grilles and gateways, leading to roadways at the south-east and south-west corners, and with beautiful fountains in lead at the north-east and north-west. . . .

A roadway about 200 feet long by 70 feet wide between the low buildings on either side leads from the Place Stanislas to the Arc de Triomphe. This is an important monument with a triple archway, flanked on either side by covered-in loggias of considerable size, and extending across the whole of the south end of the Carrière, the great oblong "place" which lies between it and the Hemicycle at the extreme north end. . . .

To return to Héré's plan, and still moving northward from the Place Stanislas, we are now in the Carrière, an oblong "place" some 900 feet long by 190 feet wide. Along the sides of this certain buildings had already been erected, notably a beautiful hotel by Boffrand, with an inner court which suggests a reminiscence of the Porto Barbaranno Palace at Vicenza. This hotel was allowed to remain and was converted into the Palais de Justice. . . . The space between was left open, so that these two buildings formed with the Arc de Triomphe three sides of a square, another instance of Héré's fine sense of architectural composition. The sides of the Carrière continue northward from the Palais de Justice, and the Tribunal de Commerce, in a line of houses of symmetrical elevation for some 600 feet, when the frontage line again breaks forward for two pavilion buildings marking the opening of the Carrière on to the Hemicycle. Between the two sides of the Carrière, and for the length of 600 feet noted above, is an oblong space, enclosed by low stone walls with groups of sculpture at intervals. The roadway runs on either side between the houses and this enclosure, and within the enclosure are two lines of lime trees on either side of a broad walk, with wrought-iron grilles by Lamour at the ends. The pavilion buildings at the north-east and north-west angles of the Carrière are in two stories and five bays, of a total width of some 60 feet. Along the front is a colonnade of the Ionic order carrying an entablature and a balustrade, which is continued along the semi-circular colonnades which enclose either side of the Hemicycle. These pavilions are considerably higher and more important than the adjoining houses, and repeat the motive noted before in Lemercier's squares at Richelieu. The north side of the Hemicycle is occupied by the Palais du Gouvernement, completed in 1760, and probably Héré's last work. . . .

Fine work was still to be done in France, but by the latter part of the eighteenth century it had lost that noble spaciousness of thought which gave its peculiar distinction to French architecture of the hundred years before.

I commend this architecture to your study, because it is, I think, in this largeness of idea that our modern architecture too often fails. It is full of dexterity, sometimes even of accomplishment, but its ideal is placed too low. Owing to many causes, and among them to Ruskin's writings, the picturesque detail, the accidents of effect dear to the painter, have usurped the place of the essential qualities of architecture, scale and proportion, the imaginative handling of buildings as a whole.

REVIEWS.

ENGLISH DOMESTIC ARCHITECTURE.

The Growth of the English House. A short History of its Architectural Development from 1100 *to* 1800. *By J. Alfred Gotch, F.S.A., F.R.I.B.A., Author of "Architecture of the Renaissance in England."* 8*o. Lond.* 1909. *Price* 7*s.* 6*d. net.* [*B. T. Batsford,* 94 *High Holborn.*]

Mr. Gotch has attained to a special position in the literature of English architecture. This is due not only to his wide knowledge and scrupulous care, but to the fact that his material is always methodically arranged, his descriptions clearly and tastefully worded, and his illustrations apt and well selected, besides being in themselves extremely attractive. Those who know his previous publications will be confident, before opening the pages of a new one, that they will find in it these qualities and much sound information.

In this they will not be disappointed when perusing the little book now in question. It is a marvel of compression, containing as it does but 336 octavo pages of clearly printed text and some 190 excellent illustrations; yet Mr. Gotch has managed to give his readers in simple narrative the essential points of a history interesting alike to the architect and to every educated Englishman, and has included a glossary of technical words for the use of the latter, as well as three admirable indices to the text, the illustrations, and the chronology.

Mr. Gotch starts with the Norman keep, and adopts throughout the excellent method of first explaining the general features of the building and the requirements it was intended to serve, and then illustrating these by views and plans of prominent examples, selecting in each case some characteristic instance, and describing briefly the manner of its occupation. In the earlier examples the total absence of comfort, or even of privacy for any but the owner, is made evident: for in the "keep" and the border "peel" security was the one object. To the modern the discomfort seems appalling.

With regard to the interior finish of the earlier houses Mr. Gotch mentions the covering of the walls, at first with a thin plastering, and, a little later, with wainscot. Of this he thinks that "the panels must have been of considerable size." But here I think he is probably mistaken, for the limit of the width of the panel was the width of the board from which it was cut. Not till the time of the complete Renaissance was the glued-up panel employed. Nor can the use of wall hangings be definitely placed as subsequent to the use of wainscotting as he suggests (p. 123), for there can be little doubt that tapestry or hangings of some kind were employed very early to give some comfort in chambers with otherwise bare walls. One other question suggests itself in examining the illustrations. Can the window (fig. 62) of Chacombe Priory be really so early as the twelfth century?

The author shows how tenacious was the tradition of the "keep," even where the desire for increased comfort and privacy had led to more commodious forms of building; so that, even in 1440, we have Tattershall, built by the same Ralph Cromwell, Henry VI.'s Lord Treasurer, who built the elaborate South Wingfield Manor House. Certainly they were very insecure times. Still more tenacious was the tradition of the Great Hall, with the arrangement which made it separate the private chambers of the family from the offices. The "hall," which was practically the only room in the early keep, was so identified with the idea of "house" that, as Mr. Gotch points out, "Hall" is still, in many parts of the country, the title for any large house. He traces carefully through the fourteenth and fifteenth centuries the very gradual development from the castle or strong place to the fortified manor house, giving not only the general arrangement, but the decorative development of such details as the doorways, windows, fireplaces and chimneys, so that the whole change in the desire for increased comfort and refinement can be followed. After the cessation of the destructive "Wars of the Roses," in which no small part of the noble families of England had perished, and with the advent of the Tudors, a more truly domestic style of mansion began to be built; and by the middle of the sixteenth century the Renaissance of Italy was influencing all building of importance. At the same time the idea of defence no longer dominated the design. The wealthy built mansions in which they could entertain royalty, or, at the least, a large company of guests. With the new taste seems to have come in a passion for erecting large mansions, and these not only displayed the new style but aimed more and more at convenience and comfort. It has been said that the embarrassment of many a great family may be traced back to extravagant building in the sixteenth and seventeenth centuries. Probably the period might be justly extended to the following century.

In the early years of Renaissance influence in England, the structure, in its main features, remained Gothic. It was in the detail that the Italian influence is at first apparent, and perhaps Mr. Gotch has laid hardly sufficient emphasis on the fact that many Italian workers had been introduced; it was this that, no doubt, led to that result.

But the Elizabethan era saw a new system of planning, of which one notable feature was the long gallery; another the rectangular staircase; chiefly also, as Mr. Gotch points out, a symmetrical arrangement of the mass. That which, however, made all other changes possible, was the complete abandonment of the idea of defence. The house ceased to be a fortress.

It is at this point that Mr. Gotch deals with the drawings of John Thorpe and those of John Smithson, of which he treated so admirably and thoroughly

in his paper read in November 1908. He gives some of these plans. They are followed by a series of delightful photographs of mansions of that period. In connection with Longleat and the story of its having been designed by the somewhat mythical John of Padua, it is, perhaps, worth while to mention the conclusions to which the late Marquis of Bath had come. His ancestor, John Thynne, who built Longleat, was secretary to the Protector Somerset. The latter contemplated building a country mansion, for which he obtained designs from an Italian. But, the Protector dying before the house was begun, his secretary made use of the designs, probably modified, in building his own house at Longleat. Thus there may be some truth in the story; although who this John of Padua was remains unknown.

Nothing could be better than Mr. Gotch's concise account of the change which took place in the seventeenth century to the formal classic or "Palladian" style. The transition, with the back-waters here and there of the older forms of building, is explained with lucid simplicity and illustrated with particularly apt examples. No less clearly does he deal with the frequently absurd sacrifice of convenience to external architectural effect as judged by empirical rules. I do not find, however, that the author makes any reference to the Dutch influence on the brick architecture of the close of the seventeenth century.

Mr. Gotch's book is an admirable compendium of the subject, and is, besides, a very attractive one. Concise as it is, it is never dry reading and never dogmatic. The author tells his story, not without an occasional glimpse of humour, and leaves his reader to profit by it. The excellence of the illustrations is a conspicuous feature, and in this the publisher deserves a part of the credit for their admirable reproduction. The book is one which everyone interested in English architecture should be glad to possess, and which gives Mr. Gotch one more claim on our gratitude.

J. D. Crace [*H.A.*].

SAINT-DENIS AND NOTRE-DAME, PARIS.

L'Église Abbatiale de Saint-Denis et ses tombeaux: Notice historique et archéologique. By Paul Vitry and Gaston Brière. 7½ × 5. *xii*, 173 *pp.* 18 *illustrations and plans. Paris, D. A. Longuet*, 1908. 2 *fr.* 50*c.*

La Cathédrale Notre-Dame de Paris: Notice historique et archéologique. By Marcel Aubert. 7½ × 5. *viii*, 168 *pp.* 18 *illustrations and plan. Paris, D. A. Longuet*, 1909. 2 *fr.* 50*c.*

It is a pleasure to call the attention of English architectural readers to these two excellent handbooks. The authors disclaim any pretension to write complete monographs of the churches in question. Their aim has been to produce handbooks as clear and precise as possible, which shall summarize the results of the latest archæological research. The references are sufficiently complete and the historical accounts and architectural descriptions tell the reader precisely what he wants to know, and what he too frequently has to search for in vain in the ordinary handbook.

Each of these two churches holds a place of the first importance in the history of mediæval architecture. The royal abbey-church of Saint-Denis is the most important monument of the earlier stage of that marvellous architectural development which constitutes one of the world's greatest building epochs. Suger's church, of the building of which we have his own account, seems to have summed up the best of everything which had been done up to his time, and to have advanced upon it. Whether it can still be called "the first Gothic monument" depends upon what precisely is meant by "Gothic"; but it is certain that it was by far the most notable work of its time. Notre-Dame, begun some thirty years later, is equally important for the more advanced stage of the development, and it is remarkable for its homogeneous character, for its original plan has been but little altered.

MM. Vitry and Brière, after telling what is known of the earlier buildings which preceded the present church of Saint-Denis, relate the story of Suger's great work, of its partial reconstruction by Pierre de Montereau in the middle of the thirteenth century, and of its subsequent alterations, degradations, and restoration. Then follows the archæological description of the building. The second half of the book is devoted entirely to the important subject of the tombs.

M. Marcel Aubert's book on Notre-Dame follows the same scheme, but here architecture naturally occupies the chief place. The history and description is admirably written in the clear and scientific fashion which distinguishes the best archæological work of our neighbours, and M. Aubert tells us what the latest research has discovered of the masters of the work employed at Notre-Dame since the middle of the thirteenth century. Not the least interesting part of the book is the description of the condition of the building after the Revolution and of the extensive works of "restoration," carried out for the most part under the direction of Viollet-le-Duc.

Handbooks to great churches which are worthy of their subjects do not seem hitherto to have been much more common in France than in England. The two books here noticed may be classed with M. Durand's little book on Amiens (a summary of his great work) as among the best of their kind. A series of *Petites Monographies des grands édifices de la France* has also just been commenced under the competent direction of M. Eugène Lefèvre-Pontalis, who has written the first of the series, on Coucy, and a second, by M. René Merlet, on Chartres has also been published.

John Bilson [*F.*], F.S.A.

WESTMINSTER ABBEY.

The Nave of Westminster. By R. B. Rackham, M.A., of the Community of the Resurrection. Communicated by the Dean of Westminster. From the "Proceedings of the British Academy," Vol. IV. 8o. Lond. 1909. *Price* 5s. *net.* [*Henry Frowde, Oxford University Press, Amen Corner, E.C.*]

The architectural history of the abbey church of Westminster falls into four periods: that of the Confessor's church; that of Henry III.'s church, extending westward as far as the rood screen; the completion of the nave, which in the Fabric Rolls is styled the *Novum Opus*, and which occupied some 140 years; and the building of Henry VII.'s chapel.

The planning of the Confessor's church was discussed by Professor Lethaby in the last issue of the JOURNAL. My own views thereon he thinks may be wrong, wherein I agree with him. There is not at present sufficient evidence to establish with certainty either his views or mine. In this matter as in others we have to wait for an authoritative monograph on the important church of Cérisy-la-Forêt, which seems still to be almost wholly unknown to English archæologists. Only the other day an eminent archæologist told me that he had been over to Normandy to study its romanesque. On being asked if he had studied Cérisy, he said he had not seen it nor even heard of it. The same was the case with the abbey church of Lessay, which is ribbed all over with twelfth-century vaults, as early, or nearly so, as those of Durham. My own repeated visits to Cérisy have convinced me that it is to it, quite as much as to St. Stephen's Caen, or Bernay, or Jumièges, that we ought to look for the incunabula of our Norman style. As regards documentary evidence also, it is by no means proved that Cérisy is posterior to Jumièges. It was indeed remodelled in part in the twelfth century, but there remain portions of work which seem to me as early as that of Jumièges. As regards the plan of Westminster, I adhere, for the present at any rate, to the conclusions of Mr. Micklethwaite as stated by him in a chapter in Mr. Feasy's book on Westminster, that is to say, with the addition of radiating chapels which Mr. Micklethwaite did not accept.

As for the origin of the design of Henry III.'s church, it is a matter of very great interest and very little importance. Professor Lethaby has such an intimate knowledge of the Abbey as is possessed by no other living man, and he believes that on the above question I am wholly wrong. I am very sorry for it. I would rather have made a convert of him than of anyone. I will not go through the details of my argument here; they are stated elsewhere, and anyone who chooses can compare them with the full statement of the opposite case on pages 78–80 of the last issue of the JOURNAL. But let me say that on this I am utterly unrepentant. I may add that some years ago, having nothing particular to do in May, and having already seen most of the mediæval architecture in France in mixture, I resolved to have a tour round the churches in the style of the Ile de France and Champagne and no others, thus hoping to get clear in my head the essential characteristics of this the premier style of Gothic architecture. Well, I saw Amiens, Beauvais, Rheims, Troyes, Auxerre, Clermont Ferrand, Limoges, Tours, St. Denis, Narbonne, and many another; and at the end of a rather monotonous month—for to a considerable extent they were but versions of Amiens—I came back to England with my head full of Ile de France and Champagne, and next morning went to Westminster Abbey in great fear and trembling, for I did not think it would stand the test of comparison with the giant minsters which I had been seeing day after day in France. Judge of my surprise, and of my delight, too, to find that it seemed to me—I speak quite honestly and not as a chauvinistic Englishman—more beautiful than anything I had seen in France: in beauty of proportion it vied with any of them, but the open triforium and complex vaulting, which had been grafted by English builders on a French design, gave it a pre-eminence which seemed to me, as it seems still, quite indisputable. The other impression made on me on that occasion—and it was solid and lasting—was how utterly, in spite of English additions and improvements, the church is non-English; to that impression I still adhere. If I may put a modern parallel, suppose the author of the noble design of Liverpool Cathedral should—*absit omen*—be called from us, and Brown, Jones, and Robinson be commissioned to carry out his design; they might substitute cross-ribbed vaults for barrel vaults, they might change the design of the tracery of every window in the cathedral, they might substitute fourteenth-century caps and bases and piers; nevertheless, through all, the design would remain Mr. Scott's. That is just the opinion I formed about Westminster. A practising architect came over from Champagne to see the site and get instructions, or detailed instructions were sent out to him—it does not matter which—and then Henry Westminster, an Englishman, got the order to carry out the design. He carried it out with certain modifications, which in every case seem to me to be improvements. But the primary credit must go to the man who drew out the plan and elevations, and he was a Frenchman.

Now we come to the *Novum Opus*. The history of the completion of Westminster nave seems till this year to have been regarded as a hopeless architectural puzzle. The late Mr. Micklethwaite gave more attention to it than anyone else. But he seems not to have appreciated the great importance of the evidence printed by Mr. Parker in the *Gleanings from Westminster* fifty years ago. This evidence consists of the Fabric Rolls—incomplete here and there—from 1267 to 1416. It was only

necessary to read these and to compare the evidence which they afford with the architectural evidence to get quite an adequate idea of what went on up to 1416. What did go on up to that date, and from that date for a century later, was of a most amazing character, and should be studied by everybody who thinks he knows all about mediæval building construction. He will find that what any sensible modern architect would do was done in the reverse way on every possible occasion. In the first place, the new nave was not built in vertical sections, but in horizontal flakes. The whole of the pillars and arches of the ground story were put up before a yard of triforium was erected. This was done in the reigns of Richard II. and Henry V. The latter also built the whole of the triforium on both sides, working, as I believe, from west to east. Then work stopped; the top of the triforium wall was covered up with thatch and tiles, and next to nothing was done till the reign of Edward IV., when Abbot Milling set at work at last on the clerestory, and built just one bay. Then came Abbot Esteney. In Edward IV.'s reign and in that of Henry VII. he built all the rest of the clerestory. What would one expect next? When the Lady Chapel of 1220 was to be vaulted they took off the roof, put up the vault, and roofed in again. But in the *Novum Opus* they put up the high roof first; this was in 1478. The vault was not commenced till 1482, *i.e.* they first built the roof, then they built the high vault underneath it. Something of the kind, however, is recorded by Viollet-le-Duc; so that in this matter they were not departing altogether from mediæval practice. But their next procedure was really extraordinary. We have been told by everybody from Viollet-le-Duc to Professor Charles Moore that Gothic construction is an equipoise of thrusts and counter-thrusts, the latter being supplied by the inward pressure of flying-buttresses. According to this accepted theory, the right thing to do next was to build vault and flying-buttresses simultaneously. Otherwise, if they built the vault first it would bulge *out* the clerestory wall; if they built the flying-buttresses first, they would make the clerestory wall bulge *in*. Fortunately they had never heard either of Viollet-le-Duc or Professor Charles Moore, and so they did not bother to build vault and flying-buttresses simultaneously. They actually disbelieved in inward thrusts of the latter, and so they set to work about 1477 and put up the whole of the flying-buttresses before they put up a stone of the vault. And nothing happened! Then at last—clerestory, roof, and flying-buttresses being all in position—they finally put up the high vaults, working, as I believe from the evidence of the heraldry on the bosses, from west to east. For all the later history of the work, as detailed above, except one or two brief statements in Widmore, I am indebted to Mr. Rackham's most valuable and important paper. From 1416 onwards the Fabric Rolls had remained till now unread. With infinite care and diligence and patience Mr. Rackham has slowly deciphered the crabbed, abbreviated canine Latin of the accounts for the whole of the last century of the *Novum Opus*, and the result appears in his paper. It is a monumental contribution to the history of English mediæval architecture. Its information is all at first hand. I do not know a more solid and substantial and reliable addition to the literature of ancient church building since the great days of Professor Willis.

FRANCIS BOND [*H.A.*].

CORRESPONDENCE.

WESTMINSTER ABBEY.

To the Editor JOURNAL R.I.B.A.,—

SIR,—In continuation of Prof. W. R. Lethaby's review of Mr. Bond's work on Westminster Abbey, I should like to point out that in one of the lectures delivered by the late George Edmund Street to the students of the Royal Academy in the spring of 1881, subsequently published in 1883 in the "Memoir of G. E. Street, R.A.," by his son, Mr. Arthur E. Street, Mr. Street, speaking of the Abbey, p. 426, states: "Here the evidence of the building itself seems to be conclusive that the King had resolved to build a church after the model of the great French churches, but employed an English architect to plan it, and he made his plan on lines which are distinct and different from those of any French architect." Prof. Lethaby also refers to Willis's opinion "that Lincoln was very French." I remember clearly, however, that the late Mr. J. H. Parker took M. Viollet-le-Duc to see Lincoln Cathedral, and that after a careful inspection he stated he was unable to see any French influence in it, either in design or detail.

R. PHENÉ SPIERS [*F.*], F.S.A.

THE R.I.B.A. SCALE OF CHARGES.

[JOURNAL 20th November, p. 89.]

To the Editor JOURNAL R.I.B.A.,—

SIR,—Some twenty years ago I acted for a gentleman, who I may as well admit was a member of the Hebrew persuasion, concerning some licensed premises as to dilapidations, as to a licence to sub-lease, and as to proposals for rebuilding and financing the same. Nothing seemed to come out of the transaction, which occupied two years, but litigation, the lessee suing the lessor for damages for breaches of covenant, for refusal to grant licences, &c., and the lessor's architect, who had written some two hundred letters over the matter, suing his client, who declined to tender any sum for the services so rendered. A duel *in petto* was carried on between the architect's solicitors and the solicitors acting for the building owner touching the details of the

architect's charges other than those which had been rendered, the matter coming before the Master and Judge in Chambers, before the Divisional Court, and finally before the Court of Appeal. Now the Court of Appeal ordered that the architect should show details of the whole of the charges, which slightly exceeded one hundred pounds, showing the charge made for every letter written and for every interview which had taken place, which would of course enable the Court to test the validity of the charges made. I mention this incident in connection with the point raised in my last letter concerning charges made by architects for interviews and correspondence, and I revert to it to emphasise the necessity for the Institute to depart and emerge from the language of obscurity and specify definite charges in its Schedule under these heads. A five-shilling unit I have ventured to suggest as a minimum charge in either case.

I once called upon an architect in connection with matters of this kind, and he informed me that if a client wished to know what his charges would be concerning any particular matter his usual method was to forward and enclose a copy of the Institute Schedule of Charges. Now if all difficulties in connection with an architect's charges can be disposed of in this easy—I was going to say lordly—way, then all would be well; but I venture to say that this is only the starting-point of them. I must admit on the whole that the Institute document does hew out *en masse* and in good outline indicate what an architect's charges should be; but inasmuch as a court of law proceeds to investigate an account from an entirely different standpoint, and insists upon knowing to the last detail how the sum charged is made up, then proceeding to detail the charges, the Institute document fails and, unfortunately for the architect relying upon it, breaks down.

Now assuming that a client calls upon an architect and contemplates building operations for the first time in his life, and the Scale of Charges has been placed in his hands, what information would the negative phraseology employed in Paragraphs Nos. 1, 2, and 5 convey to his uninitiated mind? Paragraph 1: The usual remuneration, &c., is "exclusive of measuring and making out extras and omissions." Paragraph 2: This commission does not include the payment for services, &c., "in the measurement and valuation of extras and omissions," the same point being brought out again; and Paragraph 5: "These charges are exclusive of the charge for taking out quantities." He might very well ejaculate, "Well, what on earth do they include?" Instead of proceeding upon positive lines and stating what are the whole of the customary charges of the profession, and if necessary their *raison d'être*, the individual practitioner and the building owner are left to battle them out as best they can.

I am dealing now with these two points: (1) the methods of obtaining tenders and the costs incidental thereto, and (2) the measuring and valuation of the additions and omissions made to a building in its progress through alterations which suggest themselves to the mind of the architect, or the building owner, or both, as the work proceeds. A short time ago a client requested me to prepare plans for the erection of a building, and at the same time he instructed another architect to do the same. My plans were eventually carried into execution, and the sketches which the other architect prepared and submitted the client also paid for, so as to have the benefit of two sets of ideas upon the same project. But if he had proceeded further and obtained designs by way of a more or less open competition, then he would have paid for the benefit of those additional designs in the shape of two or more premiums for the best. When the contract drawings, details, and specifications have been so far prepared and completed as to enable a contractor to give an estimate for the work to be executed or building to be built, then the building owner, having nominated the contractor, can accept the estimate; but if he proposes to himself that he may benefit by having several contractors to submit tenders for the work, then all costs incidental to obtaining such additional tenders, as in the case of obtaining additional designs, must be borne by him. If the work or building is of such a nature or magnitude as to permit of tenders being made from the contract drawings, details, and specification, then he will pay the costs of printing, lithography, or electrography, &c., of the same as the case may be, or if such be impracticable or inadvisable then the cost of preparing the bills of quantities, 2½ per cent., which charge will be included in the tenders submitted. Now it is just possible that the customary charge of 2½ per cent. may require graduating, and I suggest that for the first £5,000 the charge should be 2½ per cent., for the second £5,000 and *pro rata* 2 per cent., and for the third £5,000 and subsequently 1½ per cent.

Then (2) as to the measuring and valuing of the additions and omissions, the customary charges standing at 1½ per cent. upon the additions and 1¼ upon the omissions appear to be well within a reasonable limit. The following case occurred recently. The building owner declined to have any quantities prepared, and tenders were obtained from the lithographed plans, details, and specification. The buildings, amounting to £3,000, were completed, and the usual builder's account, drafted on extravagant lines, being submitted, showed a claim of nearly £1,000 beyond the foregoing figure, when apparently the additions and omissions should have about balanced themselves. It was necessary to instruct a surveyor, who intimated that the liability would be brought home to the building owner if he were duly notified of the appointment. The building owner, however, while benefiting enormously from the services rendered,

repudiated the claim, arguing from the Institute Schedule that it was the duty of the architect both to examine and pass the accounts, and that he could not do so without previously measuring and valuing the work, and the matter only ended under legal pressure.

It is highly necessary, therefore, to escape these triangular duels (and the architect was about to be sued in the latter case) that the Institute should, as soon as may be, set forth in detail the whole of the customary charges of the profession, clearing up those which are not so defined as they might be, and standardising others so requiring.

So to my previous list of five points must be added this, the sixth, and I regret to say that it does not altogether complete the list.—Yours faithfully,

A FELLOW.

ARCHITECTS' REGISTRATION.

68 *Aldersgate Street, E.C.*: 1*st Dec.* 1909.

To the Editor JOURNAL R.I.B.A.,—

SIR,—Most members of the Institute will agree, I think, that it is necessary we should become a united profession before we can hope to get a Registration Bill through Parliament; and this being so, in some way or other the Institute and the Society of Architects must work together, or I fear the desired result will not be brought about.

What I would suggest is, now that the by-laws as amended permit of it, that the Society of Architects and all the other outstanding Architectural Societies in the United Kingdom should be admitted as Allied Societies by the R.I.B.A.

We should by this means become a united profession under the Institute, and be able, with every chance of success, to ask Parliament for Registration.—I am, Sir, yours faithfully,

PERCY B. TUBBS [*F.*].

THE LATE HENRY HALL [*F.*].

Mr. Henry Hall, who recently passed away in his eighty-third year, was elected an Associate of the Institute in 1861 and a Fellow in 1878, so that he was one of the oldest members. It is fitting, therefore, that something more than a mere passing notice should be taken of his personality and work. He was born at Wansford, in Lincolnshire, in 1826. He entered the office of Mr. Pilkington, of Bourne, as a pupil in 1843, and on completing his pupilage he came up to London to seek his fortune. He worked for a short time with Mr. Blore, and afterwards joined Mr. Boulnois in Waterloo Place. While in his office he won his first competitions for schools at Horsington, in Somerset, and also for a chapel and schools at Appleton-le-Moor, Yorks. Although he was offered a partnership by Mr. Boulnois he decided to commence practice on his own account, which he did in Duke Street, Adelphi. About this time he was one of a small coterie of young enthusiasts who used to meet at Lyon's Inn Hall for mutual improvement. Amongst these were G. Rowe Clarke, Irvine, Allom, Boutcher, Wigley, and, if I mistake not, Thos. M. Rickman. In 1868 he married the only daughter of Captain Edwin Cooke, R.N., and removed to Bloomsbury Place, but soon after established himself at 19 Doughty Street, Mecklenburgh Square, where he remained for over thirty-six years, until he retired from active life in 1905 and went to live at Stroud Green.

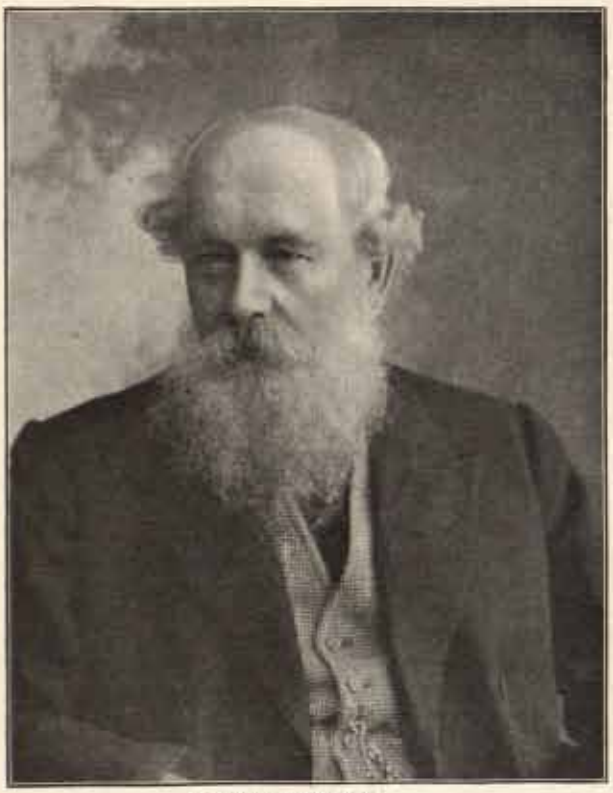
He was tremendously hard-working and industrious, and succeeded in building up a large and comfortable practice, mostly in the country, and chiefly in Somerset and Dorset. The love for competitions never seems to have left him from his early successes on to a late period. Working early and late at these he was always optimistic, and non-success in one only spurred him on to success in another. He joined in the great competition for the proposed Government offices in 1882–83, and obtained a place amongst the nine selected ones to compete in the final. Shortly afterwards, in conjunction with the writer, he went in for the Glasgow City Hall Competition, when we succeeded in obtaining the second premium and place out of 116 competitors, the late Mr. William Young being selected by a majority of one vote. The same year Mr. Hall competed for the Birkenhead Town Hall, in which he also obtained second place. It was very disappointing to come so near to success in so many important works and just miss the prize, but who of us cannot sympathise with him in this position? In smaller competitions, however, he was eminently successful.

In 1891 he was practically selected for the position of Hon. Diocesan Architect for the Diocese of Bath and Wells, for which his long experience and knowledge of ecclesiastical work eminently fitted him, but being at this time sixty-five years of age a younger man was ultimately chosen. In 1870 he became a member of the Somerset Archæological Society, and in 1899 was made a life member of the St. Paul's Ecclesiological Society.

In appearance he was not unlike the late Lord Salisbury both in features and build, and in travelling he was often mistaken for his illustrious double.

It is not given to everyone to be a star of the first magnitude, but as a lesser light Mr. Hall shone with a steady and clear effulgence. He stood for the upholding of the best traditions of the profession, never stooping to anything unworthy, always the soul of honour and absolute integrity; in a word, he was a "fine old English gentleman." By nature modest and retiring and shrinking from publicity, he never took a very active share in

the work of the Institute, but he was up to the last deeply interested in its welfare and prosperity; and the Architects' Benevolent Society he had specially at heart. In his younger days he was a keen member of the Artists' Corps. His professional duties did not absorb all his powers. He was a valued member of the old Vestry of St. Pancras, and was elected on the first Borough Council, from which he resigned only three years ago; and in connection with St. Bartholomew's Church, Gray's Inn Road, and Christ Church, Woburn Place, his help and advice were greatly appreciated.



THE LATE HENRY HALL.

He was a generous but most unostentatious giver, and many will miss his kindly help. On the 22nd October last he was laid to rest in St. Pancras Cemetery, Finchley.

The following is not a complete list of his works, but only so far as I can formulate them :—

New Churches.—All Saints', Merstham; Holy Trinity, Dorchester; Cemetery Chapel, &c., Weymouth; Cemetery Chapel and Lodge, Bridport; Congregational Church, Ashford.

Restorations.—Sandford Orcas; Maperton, Wincanton; St. Catherine's Montacute; Seavington St. Mary's, Shotley; Milborne Port, for Sir E. Medlycott; West Leake, for the late Lord Belper; South Cadbury; Castle Cary; Stourton Caundle, Dorset, and Brewham Church, Rimpton, near Sherborne; new chancel, Heigham; new chancel, Poynington, Sherborne; Bishop's Caundle, Wyke Regis Church; Tattingstone Parish Church, Ipswich; Christ Church, Woburn Square.

Schools.—Cheltenham Grammar School; West Hill Schools, Dartford, and Boys' School, East Hill, Dartford; Cheltenham; Sandford Orcas, North Cadbury; High School, Willesden; Kingsbury Schools, Langport; Milborne Port Schools; Horsington, Wincanton; Queen's Camel, Castle Cary; schools and teachers' houses, Sherborne; National Schools, Salisbury; schools and chapel, Lastingham, Yorks.

Mansions and Houses.—Restoration of "Trafalgar" for Earl Nelson; restoration of "Hestercombe" for the late Lord Portman; house for Col. Morgan, Sunbury; restoration of Manor House, Sandford Orcas; vicarage, Milborne Port; alterations to rectory, Compton-cum-Blackford; additions to South Walk House, Dorchester; rectory, Haselbury Bryan, Blandford; rectory, Evershot; additions and alterations to rectory, Horsington, and to Kingsdon House, Taunton; cottages at Ockley, Dorking.

Banks.—Head offices, Wilts and Dorset Banking Company, Salisbury, and many of their branches; Pinckney's Bank, Salisbury.

Hospitals.—Patrick Stead Hospital, Halesworth, Suffolk.

Municipal Buildings.—Corn Exchange and Market House, Dorchester; (in conjunction with Mr. Blair), Highgate Public Library.

ANDREW T. TAYLOR [*F.*], L.C.C.

27 *Nov.* 1909.



9 Conduit Street, London, W., *4th December* 1909.

CHRONICLE.

THE BUSINESS GENERAL MEETING.

On the agenda at the Business Meeting last Monday, following the election of members, were notices of motion by (1) Mr. Wm. Woodward [*F.*], (2) Mr. G. A. T. Middleton [*A.*], (3) Mr. Edward Greenop [*F.*]. Mr. Woodward not having arrived when this part of the proceedings was reached, the Chairman, Mr. James S. Gibson, *Vice-President*, called upon Mr. Middleton.

Mr. Middleton's Motions: Architects' Registration.

(1) To move that reporters shall be admitted to the meeting.

(2) To introduce to the consideration of the Institute a suggested Registration Bill for Architects, and to move its adoption by the Institute clause by clause.

Mr. Middleton, rising at the Chairman's call, said: I very much regret Mr. Woodward's absence, but it happens that my first motion is much the same as one of Mr. Woodward's, and if you will allow me I should like to take it, in the hope that when it is disposed of Mr. Woodward may be here to proceed with his motions. My first motion is, "That reporters shall be admitted to this meeting;" but I believe Mr. Woodward had desired to raise the question whether it would not be desirable for reporters to be admitted generally to the Business Meetings, as they are to the Ordinary Meetings of the Institute. I was speaking to Mr. Woodward upon the matter this morning, and his view, I believe, is that a great many things transpire here which are of interest outside the walls of the Institute, and that where there are perfectly private matters to discuss it would be quite competent for the Chairman or any other member to ask the reporters to be silent about it; and so generally it might be understood if reporters were admitted here. I had not thought of raising the general question as he has done, but having something to say myself, that I wish to be reported, this evening, I was going to move that reporters be admitted on this particular occasion. I believe that Mr. Woodward has remarks to make presently which he would like to have reported, and so, Sir, I beg to move that reporters be admitted to this meeting.

The motion not finding a seconder, the Chairman asked Mr. Middleton to proceed with his second motion.

Mr. Middleton: Since I gave notice of this motion I have received an intimation from the Secretary that a committee had been appointed by the Council to consider the drafting of a Registration Bill. My position consequently is very much easier than it might otherwise have been. For a very long period I and others with me have been fighting for the principle of registration. That principle having been conceded, the only question now is how best to carry it into effect—best for the Institute, best for the profession at large. What I propose to do is to give my views, and then ask a gentleman who has come up from Plymouth with the idea of seconding the proposition that I had in my mind, to speak after me. My suggestions for the Bill I should like to hand over to the Committee which has been formed. On the present occasion I will not press even the preamble to a division, or move any resolution at all. I should not have spoken here but that I hope to produce something which has one or two new points in it; and I may say I speak entirely as an Institute man. Members are aware that I am a member of the Council of the Society of Architects, which body has had a Bill in hand for a long period; but the proposals I have to make are such as in my opinion could not have properly come from that Society. They would have been impertinent from them. Therefore I propose it as an Institute measure. Perhaps I may say in passing that I have got into considerable hot water at the Society by moving here to-night, it being held by certain gentlemen in a prominent position there that it is inconsistent with my position on that Council to produce anything at the Institute upon registration without first consulting them. I hold a different opinion; I should certainly have consulted them if it had been a measure which could possibly have come from them. Perhaps a little of the history of the measure as I see it may be interesting to some here, for it is not all who can carry their minds back to the opening of this subject. So far as I personally am concerned, it began with a letter which I contributed to the *Building News*, I believe, of 11th April 1884, some twenty-five years ago, during the correspondence which eventuated in the formation of the Society of Architects, when I threw out a hint that registration within the Institute, which would bring every practising man into the Institute, was a desirable thing. I became the first secretary of that Society, and it was some time before the policy of registration was officially taken up there; but eventually a conference was called and a Bill was drafted by Mr. Robert Walker, of Cork, and presented in the House of Commons in 1899 by Colonel Duncan. That Bill unfortunately included engineers and surveyors within its scope, and it was defeated largely on the opposition of those two bodies. It gained a second reading and was withdrawn, and a new Bill was drafted, the Bill which, with alterations from time to time, has been produced, and is well known as the Society of Architects' Bill. It has been in existence for something like twenty years. Finding that there was no chance in the House, we started a certain amount of missionary work, and it was gradually borne in upon us, and we were told plainly by many members of Parliament, that desirable as any measure may be which is in any class interest, Parliament would not grant that measure or pass it until a distinct majority, a practical unanimity of opinion, exists upon the part of the class most interested.

Mr. John Slater [*F.*]: I rise to a point of order. The notice Mr. Middleton has given is to introduce to the consideration of the Institute a suggested Registration Bill for architects, and to move its adoption by the Institute clause by clause. I understand his preliminary remarks to indicate that he is not going to move that resolution at all but another one, and I think he ought to tell us what that resolution is before he speaks to it.

The Chairman said he understood Mr. Middleton to be speaking to the introduction of the Bill, and ruled that he should proceed.

Mr. Middleton: It was borne in upon us that we must first get the generality of the profession on our side. Coming to more recent history, we arrive at the formation at the Institute of a committee to consider the matter and

report upon the whole question. Their proposals resulted in a new Charter and new By-laws all tending towards some measure of registration. The Charter and By-laws have been adopted, and we are now on the eve of a measure of some sort. *The Builder* has taken the trouble to ascertain the general opinion of the profession on the matter, and of those who answered the postcard issued by *The Builder* I think there is a majority of eight to one in favour of registration. Of course, the general view has been that any measure that is likely to pass must come from the Institute. I have been on the Society's Registration Bill Committee from the beginning, and I should like to pay a tribute of respect to certain old friends of mine who in this long fight have gone over to the majority. I would mention particularly Messrs. Hugh Roumieu Gough, Herbert Gribble, Charles Seth-Smith, Edgar Farman, Silvanus Trevail, and Frank Vallance. The Bill which I have drafted follows very largely the wording of the old Society's Bill, but with an entirely new meaning. That wording was so carefully devised that in many respects it would be difficult to improve upon it, and it would be folly not to take it as the groundwork for anything that might follow; but I have altered its sequence for one thing, and have adopted the sequence of the recent Act passed in the Transvaal. As I am intending to hand the Bill over to you, there is no need to go into the exact wording, but I have brought in what I may call the deterrent clauses at the beginning as they are in the Transvaal Bill. These denote what unregistered persons are not permitted to do—for instance, not to use the title of an architect, and defining the meaning of the word "architect" in that connection. Then forbidding the recovery of charges for architectural work by any but those who are on the Register. Here there is a point that has given an enormous amount of trouble—how to deal with the case of those who put up an entire house, and charge for the house, and include in it the charge for architectural work. I believe it is a matter that has affected a great number. I did not see for a long while how this was to be met, but I have attempted to draft a clause which I hope will meet what has been a growing evil for some considerable time. I have adopted the Society's clause about corporation appointments, that any appointment of an architect to a corporation should be held only by a registered man. Then comes the question of certificates. The Society's Bill had a clause which made it essential that any certificates issued by an architect under any Act of Parliament should not be capable of being enforced unless they were issued by a registered man. I have tried to go a little further and include ordinary certificates to the builder, so that there shall be no certificates for payment issued for building work except by an architect on the Register. After these deterrent clauses, which of course carry penalties, come the machinery clauses. In this respect there seem to be two distinct propositions, two distinct ideas, which it was possible to follow. There is the old idea of the Society's Bill of appointing a Registering Council who should be pre-eminent in almost every matter, appointed partly by the Institute and partly by this, that, and the other body, partly by the Privy Council, and partly by a general vote of all registered men, and that the Institute should play a decidedly inferior part by having nothing else to do with the business beyond the conduct of examinations. There was the opposite course possible: to make the Institute pre-eminent and let it do everything; to enable it to register, to turn men off the roll as well as to admit them to the roll, to carry on the examinations without any supervision, to do everything in fact. I have thought a great deal over this, and it seems to me that a combination of the two would probably best meet the case. The Council of the Institute is elected annually, and it does not seem to me that that is a sufficiently permanent tenure of office for a body which should have control of the Register. Further than that, it seems to be generally conceded that in all matters an Upper and Lower House is desirable; and generally, when giving the Institute very large powers of investigating all cases of professional misconduct on the part of registered men, very large powers in the way of examination, and of course all its present powers, it would be necessary to still appoint something like an Architects' Council, to take the same place as is occupied by the General Medical Council in Medicine, as a kind of Upper House. It must be remembered, too, that as the Privy Council is already represented on the Councils of other great professions they would certainly ask to be represented on the Council of the Architects. That would be a thing which it would be impossible to refuse, and it is very much better to introduce it and authorise it at once, and to appoint a comparatively small General Council, to be appointed largely from here, partly by the Privy Council, partly by the Institute Council, and partly, perhaps, by the Registered practitioners generally; the General Council to have the power of admission to the Register on hearing from the Institute that the candidates are the right men, and to have the last voice in removals; that cases of professional misconduct should be investigated here by the Institute and reported to the General Council before being carried into effect. I have taken some trouble to devise these clauses. Then under the head of machinery there are certain sections dealing with the appointment of the Registrar. If this Institute should become the General Council, of course the Secretary would become the Registrar. If my ideas are carried out there would not necessarily be a distinct Registrar, for there is no compulsion in the matter of appointment, but possibly there might be a separate Registrar for the General Council. Now I come to the point as to who should be admitted to the first Register and how they should be admitted. It is here where my suggestion is so largely differentiated from anything that has come before. My suggestion is that there should be four classes: Fellows as they stand; Associates as they stand. Then another class styled Members, who should comprise the members of the Society of Architects and the professional members of all the Allied Societies. This class should have the same privileges as Associates in every respect, but should be called M.R.I.B.A., instead of A.R.I.B.A., just the distinction of a letter. As I daresay most of you recognise, there are a considerable number of men who are very greatly objecting to be admitted into the Licentiates Class as it is now—men who hold good practices and good positions, and who would if they became Licentiates be in a lower position than some of their own young assistants and former pupils. They object to that, and it is a reasonable objection. The Society of Architects, too, has taken so large a part in this matter from the earliest time to the present, that I think all reasonable men will say that they deserve some sort of preferential treatment. They are a large body, numbering a total of over a thousand, and some 700 of them are men in good practice and responsible architects, with a certain amount of Parliamentary influence. I think these men would want something better than a general inclusion. Then there would come the Licentiate Class, and into that class, I should say, might compulsorily be admitted—if they are to be allowed to practise in future—all men who have a certain time qualification. What that time qualification might be is a matter that is open to discussion. As I have drawn it, I have taken the old Society's wording; but I think it over severe. I have taken six years of definite practice, or twelve years as pupil and assistant or practitioner. That would sweep into the Institute in one class or another every man who has a just claim to be allowed to earn his living by the practice of architecture in the future. Then what happens afterwards? There is a short period given for this first inclusion on the Register. After that no more Members, no more Licentiates, but every man who intends to practise

architecture, before he is permitted to do so, must join the Institute as an Associate much under the present conditions; with a certain period of articles or school training necessary in advance, and then with certain examinations practically as they are now and increasing in severity as time went on. Many of us think that the present Associates' examination is not too high a qualification, and that it might well be raised in time to come. Another section, including a considerable number of clauses, I have taken almost *en bloc* from the Society's Bill. This deals with foreign and colonial practitioners, providing for mutual facilities for architectural registration between foreign States and certain great colonies and ourselves: the possibility of a man passing an examination here and being allowed to practise there, and a man passing a certain examination there and being allowed to practise here—reciprocation between one and another. I should think there must also be something which would ameliorate our Associates' examination in the case of those who are intending to practise not here but elsewhere. I may instance a case that I remember of a man practising in Burma who found it very difficult, just coming over to England, to pass in English sanitation. Of course it did not matter in the least—he might very well be exempted in sanitation under those circumstances, for there is no sanitary drainage at all, as we understand it, in Burma. Such exceptional cases would have to be met and some permissive clause introduced. I do not wish to press anything to a division to-night because I think there is a great deal in any measure or any suggestions which must be considered in detail, not necessarily by the whole Institute, but firstly almost essentially by a committee. I therefore should like to hand over the Bill as I have it here to the Committee which is now sitting; but I should hope that that Committee will see its way to joining hands, as it were, with the Society, so that there should not be eventually two Registration Bills before the House of Commons at the same time. I consider myself free to speak like this, because the Society has asked me to say that I am speaking for myself, and not for them. I should also like that Mr. Thornely, who has kindly come from Plymouth to second the adoption of the preamble, should now be allowed to speak.

Mr. H. L. Thornely [*F.*], of Plymouth: Mr. Chairman and Gentlemen, as this is my first appearance at headquarters I venture to think that, for that reason alone, I may rely on your kind indulgence. I have come, however, specially from Plymouth to address a few words to you to-night because I am keenly alive, as I believe the provinces are keenly alive, to the necessity of some form of registration. Mr. Middleton has so carefully explained to you his proposals as to the form that Bill should take that I do not intend to enter into them in detail. Suffice it to say that I am earnestly of opinion that a measure framed generally, I do not say in every detail, but framed generally on the lines he proposes, would receive the strong support, not only of the whole of our Allied Societies, but of practically every individual architect in the provinces. In saying that I am not speaking without some knowledge of my facts. My early training in the North and some years of practice in the South have given me an opportunity of keeping in close touch with a number of professional friends in these and neighbouring centres and of learning their views. Last winter I had the privilege of addressing the Liverpool Architectural Society on this important question of registration, and I was deeply struck and impressed by the general trend of the discussion that followed. Not one of the speakers—and they included many of the leading practitioners in Liverpool, members of this Institute as well—not one of the speakers seemed to have any objection to raise to such a proposal. The only difference of opinion seemed to be as to whether the Bill should be introduced by this Institute or by an outside body. The general verdict certainly seemed to be in favour of a measure framed by our Council and supported by the general body of members. In those sentiments I heartily agree. I do not believe that those views are the views of Liverpool alone; I believe they would be found to express the opinion of all our Allied Societies. I have given you, so far, what I may call the provincial point of view on this question, but I am not quite sure that it is not the London view as well. At any rate, *The Builder*, as you know, a few months ago instituted a *plébiscite* on this important question. I was not surprised at the result of the voting, which showed an overwhelming majority in favour of registration; but I was almost surprised to find that the London vote practically showed a similar return. I venture to think that if that vote can be taken as showing the London feeling in the matter, they are as much Registrationists as we are in the provinces. Now whether we hail from town or country, let me try to give you one or two reasons why we Registrationists consider this Bill a necessity. We ask for it chiefly for two reasons: in the interest of professional control, and of a higher standard of professional education. I know very well that the large majority of those in practice to-day—a very large majority indeed—are imbued with a proper sense of what is right, and carry out day by day the recognised canons of professional etiquette; but, on the other hand, we possess a section who can only be controlled, I am sorry to say, by law. I do not know whether you possess these men in London, but unfortunately we do in the provinces. I can tell you of an authentic case—I can quote chapter and verse, if it will serve any good purpose—where an architect had been called in by a committee for their new church and schools. His sketch plans had been approved, his approximate estimate had been sanctioned, and he had received instructions to prepare working drawings. At a much later stage, when these drawings were in the quantity surveyor's hands, another architect obtained the ear of the committee, and he told them they were not getting sufficient for their money; if they would only entrust him with the work he would give them an angle-turret and an additional classroom. I believe the bait he dangled before them was an angle turret and an additional classroom. At any rate they swallowed it. The committee had some sort of a conscience, because they came to their first choice and said, "What are we to do? We want to do the best for our money. We are told we ought to have an angle-turret and another classroom. May we ask you to provide it for us with the funds we have authorised you to spend?" And they were much grieved when the architect said he could do nothing of the sort. So what could this poor committee do but pay him off?—and paid off he was. I could tell you of another case where a man in a very large provincial city is to-day engaged in carrying out professional work at practically half the rates that this Institute recognises as proper payment. And not only this, but I have been told—I will not vouch for its accuracy, but I have been told that he includes the quantities as well. Whether that is so or not, I do know that he has actually been able to come before public bodies, and even show them when another man had been first retained into the bargain, that by going to him the amount of money they would save would be considerable. When this argument is brought forward in a philanthropic spirit, I venture to say it is a very powerful one, but I also say it is time that such things should be controlled. I believe registration would do it, because if every architect were a registered practitioner he would know that such courses of action would render him liable to be struck off the rolls. Moreover, as Mr. Middleton says, he could not recover his fees in any court of law. I venture to think that this might at least prove a powerful argument. Again, ought we not also to have some further control over public competitions? I got hold of a set of conditions the other day

or by no means a small building. Of course there was no assessor, and of course they wanted very much more for their money than it could possibly provide. These facts did not surprise me; but I was almost surprised to find that although they did not propose to appoint a clerk of the works the architect was to give adequate supervision to it. I take it that that means, when translated into plain English, that the architect is to pay the clerk of the works' salary himself. Is it not time that such people should be controlled by law? Certainly if we had a Registration Act it would be possible to prevent any registered practitioner from entering into these competitions, and such competition promoters would, like Othello, find their occupation gone because they would not be able to obtain a solitary competitor. But let me turn for a moment to the side of education. We are told that a Registration Bill must at once fall to the ground, because any measure of compulsory examination would have to be of a very low standard indeed. I cannot agree with that. Does that apply to-day, for instance, in the Army, the Navy, and the Church, the Law, or even Medicine? And if that is so, why should Architecture stand alone? And even if it was a reasonable argument a few years ago, is it so to-day? I venture to think that the various schools that have sprung into existence of recent years have put the whole matter of architectural education on an entirely different basis. A youth who has taken his two years' course and had three years subsequently in an office is in a much stronger position to face a stringent and searching examination than the student who has only served four or five years in an office in the ordinary way. I also believe that this Bill is bound to raise the general standard of education. We must all of us know men who, if they had been forced to take an examination at an early stage of their career, would have been better men and be doing better work to-day by reason of the study that such an examination would have enforced. There are many other reasons that I could give you; but time is short, and I do not intend to trouble you with them. Suffice it to say that I believe in such a measure heart and soul, and I believe that all in the provinces agree with me. I would ask our Council to give such a measure their earnest and careful consideration, because in doing so I believe they will be acting for the welfare of our great profession generally.

Mr. H. Heathcote Statham [*F.*]: I should just like to remind Mr. Thornely of one point which seems to be overlooked. He remarked that in our *plébiscite* the proportion of architects in London in favour of registration was the same as that in the provinces. So it was. I may say that the proportion was very much what I expected; but all those gentlemen who use that argument forget that there is something else than counting by numbers, and if Mr. Thornely will refer to the names of those in London who have voted against registration, he will find that those against it include, I think, every one of those whom we regard as the most eminent and famous architects of the day. That is not a point to be overlooked; it is not a question merely of numbers.

The Chairman: I take it, Mr. Middleton, that you do not propose to make any motion, but you are quite willing to hand your proposed Bill to the Council of the Institute for its consideration.

Mr. Middleton assented, and handed the document to the Secretary.

The Chairman: I have no doubt the Council will take every opportunity of considering it.

Mr. George T. Brown [*F.*], President of the Northern Architectural Association: I should like to say a word or two. I represent one of the Allied Societies, and I do not think as a Society we are in any way behind the last speaker in supporting registration, but I wish to dissociate my Society entirely from the action taken by Mr. Middleton and his seconder to-night. We are quite satisfied with the action which has been already taken by the Institute. The question of this Registration Bill has been a vexed one for a very considerable time. At first the prevalent feeling appeared to be against registration, but by dint of continual insistence it became evident that a majority of practitioners, particularly in the provinces, were desirous that something of the sort should be done, and I think that the Institute Council by the steps they have already taken, first of all by the new Charter and the revision of the By-laws, and the promise that a Registration Bill, when the By-laws have received the consent of the Privy Council, should be produced and followed up, have quite satisfied the majority, certainly of my Society, that the Council of the Institute are taking the step best calculated to unite all the conflicting elements with regard to registration, so as ultimately to achieve the object we all have at heart. I feel that Mr. Middleton has been rather lacking in loyalty to the Council of the Institute in taking the step he has to-night. This is a matter which it is very desirable should be left entirely in the hands of the Council of the Institute, and of the Committee they have appointed for the purpose of its consideration.

Mr. George Hubbard, F.S.A. [*F.*]: I think, Sir, in fairness to Mr. Middleton, it should be remembered that he brought forward these suggestions before he was aware that a Committee had been appointed, and we ought to be very grateful to him for the enormous trouble he has taken.

The Institute Schedule of Charges: Mr. Greenop's Motion.

To call attention to the unsatisfactory position of the present Institute Schedule of Charges, and its inadequate provisions for many of the circumstances arising in daily practice, and propose a Resolution.

Mr. Edward Greenop [*A.*], rising at the invitation of the Chairman, said that since he had put down this motion he had heard that the Council had some intention of revising the Institute Scale of Charges. If the Chairman were at liberty to give him any information on the point, it might shorten what he had to say.

The Chairman replied that no Committee had been appointed, but if Mr. Greenop would bring forward his resolution, the matter would receive the consideration of the Council at an early date.

Mr. Greenop: The subject I wish to put before the Institute is that of the Schedule of Charges, or, as I think it is described in the publication, "The Professional Practice as to the Charges of Architects." It may be known to most of us that there has been a great deal of dissatisfaction expressed during the last few years with the authorised scale of charges, more particularly with regard to its wording. That dissatisfaction has found expression in the correspondence columns of our Journal and also in the professional Press. By a mere coincidence, the day after I gave in my notice a leading article on the subject appeared in *The Builder*. I do not propose to go into any details as to the shortcomings of the Schedule; that can be dealt with elsewhere. I should like to say, however, that there has been since the last revision in 1898 an attempt to revise the Schedule. Shortly after the somewhat famous case of *Gibbon* v. *Pease*, which ended somewhat disastrously for us as regards the ownership of drawings, it was suggested by the Council that some good might possibly be done by dealing with that hardship under the Schedule of Charges by altering the phraseology, and it was remitted to a Standing Committee with that object with a very narrow and cautious reference. The Committee did take some trouble and issued a report, making some slight amendments, and dealing with the question of ownership of drawings. That report was sent in now nearly four years ago, and we are still awaiting a reply! I do not suggest that it was sheer

obstinacy or forgetfulness; I allude to it because the reason why it was shelved is well known. The great argument advanced against revision of the Schedule has been that any attempt to amend it would be to impair, if not to entirely destroy, its value as a precedent in a court of law. Now, first of all, its value as a precedent in a court of law seems to be very doubtful. As we know, judges never lose an opportunity of saying that they are not bound, and see no reason why they should be bound, by a scale drawn up by architects themselves for their own benefit, and that they will award such charges and fees to the architect in disputed cases as they think reasonable. I take it that the effect of that is that they do not attach any value to that document by reason of its age. As a matter of fact, having been revised so late as 1898 it is only eleven years old, and can hardly claim the merit of antiquity. In the first place, I do not understand that that scale was ever drawn up by the Institute at all. We have a practice of alluding to it as the Institute scale of charges, but I find, on reference to the first Schedule of 1872, that it is described as a Schedule sanctioned by the Institute. It is, I think, merely a record of what the persons who drew that document up in 1872 found to be the custom and practice among architects generally. They made merely a record, and it is nothing more than a record. The only value, therefore, that the present document has in a court of law is its general use by the profession, so much so that if we can conceive that we drew up an entirely new Schedule to-morrow, and by some magic wand we could say six months hence that every architect in practice in the kingdom had used it and not departed from it, that would be of far more weight in a court of law than the present scale, or any other scale a hundred years old. It seems to me, therefore, that we have been rather under a misconception in thinking that this is a thing the value of which would be impaired by any kind of reform. The one great fallacy to my mind is that that argument was equally good in 1898 when the scale was revised, but it does not seem to have had any weight then. It would be equally good in another eleven years' time, or another fifty or a hundred years' time; in other words, having once made a Schedule you are for ever precluded from altering it, however inapplicable it may become from time to time by alterations in our circumstances. I do not propose to go into any details. It has been suggested that the actual scale itself of 5 per cent. should be increased. It has been seriously suggested by one of our members in the JOURNAL that we should be paid 6 per cent. instead of 5 for general work. Of course, we would all like that, but personally I think it would be a great mistake, and I am going to propose what may sound a very revolutionary change. I am going to propose, not an alteration of the percentage, but an alteration of the basis on which it is charged. Now we know perfectly well we do not get 5 per cent.; it is only a theoretical 5 per cent. In practice we never get it. Five or six years ago you might safely have said that when the lowest tender came out at £2,000 it was a fair price for the job. Now it is nothing of the kind. We know that now for that same work we could get a tender for £1,500. In other words in place of £100, being 5 per cent. on £2,000, we now get £75, being 5 per cent. on £1,500, for the same amount of work, or less than 4 per cent. That is not a fancy argument, it is what we know really happens. To my mind the basis on which the 5 per cent. ought originally to have been charged, and should now be charged is the mean between the highest and the lowest tender. That may sound a very revolutionary alteration, but the more you think of it the more I think you will see that it has no solid objection whichever way you look at it. It is obvious that at the present time the fair price for a job is the mean between the highest and the lowest tender. We know that in most cases builders are taking work without any profit, and in some cases at a loss, to keep their shops going. I think that is worthy of consideration when this matter comes, as I hope it will, before a Committee. What I want to press upon the meeting is that a grievance exists, and now that we are getting our new Charter, we should not let it stand still, but we should try to do something, even if we fail. I do not think that this matter should go, if I may say so, before a Standing Committee, because that would mean that it would be dealt with perhaps once a month, and with other matters, and would hang over a long time. I think that the grievance is really urgent, and I would suggest, therefore, that a special committee be appointed to deal with it; and I will put my motion in those terms. As a matter of fact, I have not asked anybody to second my motion. I have purposely not done so, because I feel that I would like it to stand on its own merits, and if it is worth nothing I would rather that nobody seconds it and that it should fall to the ground. I have only now to read the resolution, which is as follows: "That in view of the inadequacy, ambiguities, and deficiencies of the publication issued by the Institute entitled 'The Professional Practice as to the Charges of Architects,' it be an instruction to the Council to appoint at once a Special Committee with a mandate to prepare a circular letter for issue to all Fellows and Associates inviting statements of any difficulties they may have met with in its use and suggestions for amendments. Further, that the replies when received be referred by the Council to the Committee for thorough investigation and report at an early date."

Mr. W. H. ATKIN BERRY [*F.*]: Although I cannot share all the views and arguments that Mr. Greenop has so ably brought before us, I do feel that this question should be investigated and very carefully considered at this period. I have therefore very great pleasure in seconding the motion for the appointment of a Special Committee to inquire into it.

Mr. G. E. NIELD [*F.*]: Before the motion is put I should like to give my experience with regard to the Schedule of Charges. Mr. Greenop says that the document is comparatively unknown. That has not been my experience. I remember seven years ago a Chancery action in which I was engaged, involving a series of actions in which the charges were somewhat considerable. My account was a matter of about £450, and I was directed to appear before the taxing master. I objected very strongly to do so, but I was persuaded, and when I went I took with me the Institute Schedule. I showed the document to the taxing master, and he said he was very pleased to see it; he had heard a great deal of it, and where could he get a copy? I gave him a copy, and the result was very satisfactory to myself. Then with regard to the judges, there is no telling what the judges of the High Court will do. In justification of this statement let me add that a High Court judge made a special order that my plans were not to be paid for, not because their accuracy was challenged, for he and the jury used them throughout the trial, but wholly because (as he stated) the scale was larger than he considered convenient. I have much pleasure in supporting Mr. Greenop.

Mr. W. HENRY WHITE [*F.*]: I quite appreciate and fully endorse what Mr. Greenop has said. Mr. Greenop remarked that he did not wish to go into details, but I do not think he mentioned what might appeal to us as a reason why these charges ought to be increased; that is to say, you want to consider now, not the amount of work that an architect had to do when this scale of charges first came into vogue; but what is the work that the architect has now to do under the same scale. If you take that into consideration, and the Committee see whether they can ascertain from others besides themselves the amount of work involved, and the actual cost of production compared with the amount received, it will not take them very

long to come to the conclusion that the profession of architect is the worst paid of any of the professions.

Mr. ALAN E. MUNBY, M.A. Cantab. [*A.*]: May I say that I think the whole subject is very much bound up with the question of registration, and if we are going to have a Registration Bill, surely it would be much better to deal with a question like this after we get registration than before. It is a matter that is going to raise various issues. There is the question, for instance, of the legitimacy of professional fees in connection with the services of specialists, which is full of complexity. I doubt very much whether the Institute at the present time is in a position to consider the revision of our scale satisfactorily, and I should have thought it would have been very much wiser to take up the question after registration, now so imminent, is achieved.

Mr. C. R. GUY HALL [*F.*]: I wish to support the motion of Mr. Greenop, and I should like to know whether the Institute has any intention of applying to Parliament to legalise the charges of architects.

THE CHAIRMAN: That I cannot say.

Mr. GUY HALL: I fancy that I saw a statement in the JOURNAL some time ago that the Institute had such an intention. If so, under the Solicitors Act of 1881, the general law, it is necessary to detail the whole of the charges. I will read you the last clause:

> "In ordinary cases to every day of not less than seven hours employed on business or in travelling, £5 5*s*.
>
> "Where a less time than seven hours is so employed, per hour, 15*s*.
>
> "In extraordinary cases the Taxing Master may increase or diminish the above allowance, if for any special reasons he shall think fit."
>
> By Clause 8 (1) "A Solicitor may enter into and make a special contract with a client as to his charges."

If the Institute has the intention of going to Parliament for these powers, I think we ought to detail those charges so as to put them in the Bill.

Mr. J. DOUGLASS MATHEWS [*F.*]: With reference to Mr. Greenop's remarks as to the Institute Schedule of 1872 being only a sanction of the Institute, I may say as secretary to a special committee appointed by this Institute at the time that the Schedule was drawn up as a basis of charges, it was very fully considered before it received the sanction of the Institute. It was sent to the several Architectural Societies in the Kingdom (as at that time they were not allied to the Institute), and at a Conference of these Societies with the Institute the Schedule was adopted and accepted as a scale of fair and legitimate charges by architects. This may be a matter of historical interest if not of value.

Mr. H. A. SATCHELL [*F.*]: I should like to support Mr. Greenop's motion, because after four years of hard work I know he feels keenly that some special whip-up is required. A Registration Bill is on the *tapis*. When it is going to come off the *tapis* may be a question of some years. The Institute moves very surely, but sometimes rather slowly. I have the honour to follow Mr. Greenop in the office that he recently held, and questions are continually coming before us from all parts of the country as to what are the proper charges for various services, which shows obviously that among the profession at large there is very great doubt, even among those who desire fairly to base their charges on the Schedule.

Mr. J. J. BURNET, A.R.S.A. [*F.*]: I cannot listen to the speeches made to-night without asking, What is there in the profession of an architect that relieves him from the ordinary commercial provisions of the market? Our fees may not be adequate for the labour given, but do they not constitute the client's measure of the worth of that labour to him? If the public do not appreciate it correctly, may it not be through ignorance of the real purpose and value of our services, not as individuals, but as a profession. Would we not therefore be better employed as a body in discussing how to inform the public regarding the nature of these services and the means to be adopted to increase public appreciation of our art, than in discussing tables of fees which we know even if they are paid will in some cases only make men wealthy, and in the best of cases, even if doubled, could not represent the artistic value of the work done? After all, though the labour of making plans may be paid, under a system if you desire it, the plans do not of themselves transform or constitute the work they represent a piece of architecture. Is it not a fact that we can and must learn to make our own clients before we can even pretend to make our own fees? Personally, I have always thought we should be free, like other professional men, to make our own contracts.

THE CHAIRMAN: Before the Meeting votes on this motion, with the spirit of which I am in entire sympathy, I would like to point out that on reading the resolution the meaning it conveys to me is that you have restricted the action of this Committee that you wish to be appointed in a very great degree; in fact, I think you have restricted it so greatly that the Committee will be of no effect. I would rather suggest to Mr. Greenop that he should make his reference to the Committee very much wider than it is in the terms of his resolution.

After some discussion as to the form of the Resolution Mr. Greenop accepted the Chairman's suggestions and the Resolution was amended as follows:—

> "That in view of the inadequacy, ambiguities, and deficiencies of the publication issued by the Institute entitled "The Professional Practice as to the Charges of Architects," the Council be requested to appoint a Special Committee to prepare a circular letter for issue to all Fellows and Associates inviting statements of any difficulties they may have met with in its use and suggestions for amendment, and to take such other steps as the Committee may think fit, and to consider the whole question and report thereon at an early date."

Mr. ATRIM BERRY, as seconder, having assented to the amendment, the resolution was put from the Chair and carried unanimously.

Mr. Woodward's Motions.

(1) The London County Council's General Powers Bill 1909, and the note thereon on page 643 of the JOURNAL for 24th July 1909.

(2) Architects' Responsibility in connection with dry-rot in buildings.

(3) The necessity of Assessors in Competitions adhering, strictly, to the cost limits laid down by Promoters.

(4) The advertisements of "Stores" and other Firms as regards the employment of establishment architects.

(5) The advisability of admitting reporters to our Business Meetings.

(6) To inquire what has been done by the Council in connection with the proposed new Bridge over the Thames.

Mr. WOODWARD, who had arrived after Mr. Middleton's first resolution had been disposed of, on being called upon by the Chairman, said: What has taken place during the last hour and twenty-three minutes shows the mischief of being late, but I relied on that absence of strict military time which has sometimes occurred in the occupancy of the Presidential chair. With your permission, Sir, I should like to bring No. 5 of my items, "The advisability of admitting reporters to our Business Meetings," to be No. 1. I have attended many Business Meetings of the Institute, and I may say I have never heard at those Business Meetings anything of what you may call a strictly private character. My opinion is that, although the

reports of the proceedings of these Business Meetings are excellently done by our own reporter, the report itself only appears in the JOURNAL of the Institute, and therefore is only circulated amongst the members of the Institute. If we admitted the reporters of professional journals, what takes place at these Business Meetings would be circulated not only amongst members of the Institute, but among members of the architectural profession generally. In going into the reading rooms in many large hotels, particularly in the provinces, we find all the professional journals, and those journals are read by visitors to the hotels, and the work of this Institute is thereby much enhanced and much propagated. I see no reason whatever why reporters should not be admitted to our Business Meetings. If any subject is intended to be brought before a Business Meeting of an essentially private character, or if it is proposed that it should be brought before such meeting, then I think any particularly private matter could be well discussed either by the Council itself or by one of the Standing Committees. If, again, in the course of the discussion which takes place in this room any matter arose which was considered undesirable to be published, I am quite sure that, as is usual, a word to the reporters would lead to their wishes being respected. I, therefore, formally move that, for the future, reporters—and when I use the word reporters I mean the reporters who attend our Ordinary Meetings—be admitted to all our Business Meetings as well as to our Ordinary Meetings.

Mr. MIDDLETON seconded the motion.

Mr. G. E. NIELD [*F.*]: It seems to me that there is another side to this matter. I remember some meetings here when there has been a good deal of unpleasantness and a good many hard things said, and I do not think that many of us would like to see them circulated. Although I think that hard words are sometimes quite rightly expressed, yet I do not think it would be in the interests of the Institute if they were to be spread broadcast. There are occasions when reporters should certainly not be present.

Mr. H. HARDWICKE LANGSTON: I support Mr. Woodward's proposal. If we allowed our business meetings to be reported in the professional journals, it would instruct the public in matters which we are, I think, much too sensitive about. We discuss matters which affect the public, and it is certainly our policy to let the public know what the duties of an architect are. We know that other institutions, not with the historical prestige of our own, are reported in full, and names are published there that the public get hold of, and they go to those names for advice in matters on many occasions when it would be better that an architect should be called in. In my opinion it would be to our advantage to allow reporters to be present at all our meetings, and any hint that might be given to them not to insert certain things would of course be obeyed. I therefore thoroughly support Mr. Woodward.

Mr. H. HEATHCOTE STATHAM [*F.*]: I suppose I may be thought to have a double interest in this question,—partly as an editor and partly as an old member of the Institute. As an editor I beg to say that we do not want reporters at these meetings at all. It is already difficult to find space to report all the things that have to be reported. And coming to the other side, as an old member of the Institute, I am absolutely opposed to it. I think it would be very bad for the Institute. We are constantly discussing here subjects that only really concern ourselves—subjects of professional practice—and we often have a great deal of dissension which we endeavour to forget afterwards, but it is certainly not well that those dissensions should go forth to the public and that people should be able to say: "See how these Architects quarrel among themselves." I think the result might be very serious to us indeed. I am decidedly of opinion that the practice of these meetings being so far as possible private should be kept to, and that it is much better in the interests of the Institute.

Mr. MATT GARBUTT [*F.*]: We want to discuss domestic matters quite freely, and if there were any danger of their being publicly reported it would very much check that free discussion which is sometimes so desirable. It would, I think, be a very great mistake to admit reporters to these meetings.

The Resolution being put to the vote was defeated by a large majority.

Mr. WOODWARD: The next subject I wish to call the attention of the Meeting to is the London County Council General Powers Bill of 1909 and the note thereon on page 643 of the JOURNAL of 24th July 1909. I have not the least idea who wrote this article; therefore, in any observations I am going to make I do not know upon whose toes I may be likely to tread. It is not signed, but I have no doubt it is intended to be a general review or report of the proceedings in the House of Commons Committee on the Building Act Amendment Bill. The second paragraph says: "The Institute had petitioned against the Bill on the ground. . . . (2) that in any case such enactments should be limited to the external and not extend to the internal structure of the buildings." That you know, Sir, as you attended the Committee and gave evidence, was the crux practically of the whole thing. What I said at the meeting on the original Report in May last, I need not repeat here, but I did point out then that to my mind the desire to differentiate between the external and internal parts of a steel frame structure was absurd. Then we go a little further in the same paragraph and we find these words: "Mr. Freeman, K.C., and Mr. Lewis Coward, K.C., appeared in support of the Institute petition, and evidence on its behalf was given by Messrs. Edwin T. Hall, James S. Gibson, and William Dunn." At this stage I should like to ask the Secretary of the Institute to be good enough to inform this meeting of the total legal costs incurred in connection with the proceedings in the House of Commons on this subject.

THE SECRETARY: £506.

Mr. WOODWARD: Out of the Institute's funds there have been expended £506 on this opposition to what I conceive to be a most reasonable Bill, particularly as it had its foundation in a communication which was made by the Institute itself to the London County Council in 1904 at the request of Mr. Biley, who communicated not only with the Institute but with the Surveyors' Institution and other bodies connected with this subject. The opposition to that Bill has cost us over £500. But be that as it may, to my mind there is no reason whatever, having decided to oppose the Bill, why we should have employed two leaders. One leader and a junior, or even a junior alone, would have been ample. To employ two leaders in a case like this is to my mind quite a waste, so far as one leader goes, of the funds of the Institute. Then at the commencement of the third paragraph of the article it says, "Up to the last day of the hearing the general impression was that the promoters had failed to justify their proposals." But I find on reading the Minutes of Evidence, which I have had the pleasure of doing, that on the 25th June the Chairman distinctly stated that the Committee did not require any further evidence with regard to the particular section of the Bill relating to the internal and external construction of steel-framed structures. So that the paragraph is not correct in that particular. Then at the bottom of the third paragraph it says: "This decision came as a great surprise, especially in view of the fact that the Local Government Board had reported that the provisions of the clauses were too rigid and recommending their being carefully reconsidered." I do not know why the Local Government Board should have been dragged in there, because the requisitions of the Local

Government Board were really more stringent than those required by the Institute. For example, the Local Government Board suggested that the maximum pressure of concrete foundations should be reduced from 12 to 10 tons per square foot; so that we need not rely very much upon the Local Government Board with regard to the reasonableness of these clauses. Then further down in paragraph 3 it is stated that it was "understood that what weighed most with the Committee was the evidence of Captain Hamilton, to the effect that in the interest of public safety in case of fires it was expedient that the proposed enactments with respect to the internal construction of buildings should be sanctioned." That is not what I conceive to be quite a fair, or at all events not a full, representation of what took place, because I find on reading the Minutes of Evidence that Mr. Searles-Wood, who is a Fellow of the Institute, gave evidence before the Committee, and expressed his opinion that it would be mischievous to differentiate between the internal and exterior parts of these structures. That ought to have been mentioned in the report. Then, again, Mr. Sachs, representing, it is true, the British Fire Prevention Committee, but who is also an architect, gave evidence to the same effect as Mr. Searles-Wood. Then there was Mr. Henry Adams, a member of the Institution of Civil Engineers, who gave evidence distinctly against the views of the Institute with reference to this particular form of construction. Then the District Surveyors' Association were also against the view taken by the Institute; and lastly, I find on reading the Minutes of Evidence that the distinguished counsel for the London County Council did me the honour to quote every word that I uttered with regard to this particular form of construction in this room in my criticism of the Annual Report. That is never mentioned, of course, but I read with very much pleasure the cross-examination of Mr. E. T. Hall, because he said that the Institute was practically unanimous in regard to this matter, and he was tackled by counsel and asked whether he did not hear the words that I ventured to use at this Annual Meeting. Mr. Hall said that he did, but that Mr. Woodward was not a member of the Council. That evidence should, I think, have been mentioned in this report—which is a résumé of what took place—and that the gentlemen I have named gave evidence entirely contrary to the views of Mr. E. T. Hall, and I am sorry to say contrary to the views of the distinguished gentleman who now occupies the Chair. On the same page, page 643 of the JOURNAL, I read with very much astonishment that this Royal Institute having expended over £500 in opposing the Bill, and having received the views of the Chairman of the Committee that as to that part of the preamble at all events the views of the Institute were not to be admitted by the Committee—who sat upon this Bill for very many days, and listened no doubt attentively to all that was said and to the views expressed by the London County Council—notwithstanding all that I find on the same page: "The Council have resolved to petition the House of Lords against the Bill, and a petition the terms of which are as follows has already been lodged," and then they proceed to give the terms of the petition. I venture to think that the Council, having been defeated on the Bill, and having determined that they would appeal to the House of Lords, should have consulted the General Body. I think the Council went considerably beyond, not their powers, because they have power to do it, but considerably beyond what I think reasonable and proper for the Council. What has become of the petition I do not know. So far as I know nothing has been done, and I sincerely trust, Mr. Vice-President, that, taking all things into consideration, and bearing in mind the Act itself, nothing further will be done in opposing this measure, because if you look at the Act itself you will find that the particular subjects upon which this Institute held very strong ground have been so modified that I feel certain that with those modifications the Act as it now stands ought to meet with the general approval of the Institute. In an article upon the subject which appeared in *The Builder* of the 13th November 1909, the following words occur: "Although the new regulations may not be absolutely beyond criticism, they provide a thoroughly workable solution of the problem which has long confronted architects and structural engineers in London, and bear throughout abundant evidence of the great care which has been taken to eliminate comparatively slight blemishes, and to consider the interests of architects and builders without disregarding the safety of the public." And a journal called *Concrete*, of September 1909, speaking of these steel-frame structures, makes practically the same comment upon the Act, or rather the Bill as it was then, and says in so many words that it is a Bill now that ought to meet with the general approval of everybody. I consider that the Act as now published does protect the public, architects, builders, and clients, and will give them a very reasonable provision for dealing with these new steel-frame structures. I will just quote to you three or four sub-sections of Section 22 of the Act as showing how reasonably the Committee met the views of this Institute and other bodies. Section 22, sub-section 31, with regard to new buildings, runs thus:—"by plans and sections of sufficient detail to show the construction thereof, together with a copy of the calculation of the loads and stresses to be provided for and particulars of the materials to be used; and should such plans, sections, calculations, or particulars be in the opinion of the District Surveyor," and so on. That is a very different thing from what it was, I admit, as the clause was originally drawn, but I feel quite certain that no architect can raise reasonable objection to that clause in the Act as it now stands.

The CHAIRMAN: That is what we got for our £500.

Mr. WOODWARD: I do not propose to make an estimate of the value of the clause with regard to the £500, but I do say, and I think you will all agree, that the modification in that clause is one of great importance. Then we come to another sub-section, 33, which says: "Any person dissatisfied with any requirement of the District Surveyor under this section may, within fourteen days of the date of the service of a notice from the District Surveyor of such requirement, appeal to a Petty Sessional Court, who may make an Order affirming such requirement or otherwise." I am very sorry that this question of appeal should go to a police court magistrate, still that is the Act, and I believe it was an arrangement made between the parties. We all know, those of us who have attended police courts, that we have to wait hours if we are taking dangerous structure cases, in a dirty court, waiting for the magistrate to deal with our case. The idea of leaving a question of appeal on a highly technical matter like this to be decided by a police court magistrate is, to my mind, very regrettable, because my experience of police court magistrates is this, and all those gentlemen who have attended before police court magistrates will agree with me: if you take a case of a dangerous structure the magistrate knows nothing whatever as to whether the structure is dangerous or not, but the statutory officer, the district surveyor, is giving evidence before him, and the district surveyor says it is, and I have heard the magistrate say, time after time, "I am not going to take the responsibility of saying that this building is not dangerous when this gentleman says it is." Then Subsection 34 says that the Council may "modify or waive any of such requirements or with any term or condition which the Council may attach to any modification or waiver may appeal to the tribunal of appeal." That is a question of waiver, and I think that is a clause which will work very satisfactorily. I think the London County Council is quite entitled to waive or modify certain of these subsections,

and if you are dissatisfied with that waiver you can go to the tribunal of appeal, which, I may at once say, is now constituted, under Section 25, of three members of the present tribunal and one member appointed by the Council of the Institution of Civil Engineers. I consider that a proper tribunal to deal with such technical matters, and I think we ought to agree with the London County Council in the wisdom of appointing engineers, because practically all these questions devolve upon engineers. Then the only other subsection I will refer to as a reasonable one in the Act is subsection 35, which says one month for the notice of waiver or modification to be communicated to the applicant, and in default the Council shall be deemed to have granted the application. Except in holiday time, which is referred to in the Act, that gives the Council one month with regard to its waiver, and if they do not communicate their refusal in a month you may take it that the matter is approved. With those sections in the Act I believe it is thoroughly workable. The Council in their wisdom think the £506 well expended, and their Vice-President seems to think that even on one clause alone the money has not been absolutely wasted. There are one or two other observations on this petition to the House of Lords. I do not know who worded it, but I detect in it the fine Roman hand of a most useful member of the Institute, who is not now in the room, and I think if I just read one or two paragraphs of it, you will detect the curve of the fist. It says in paragraph 5: "Your petitioners' Institute, as the only chartered body of architects in the United Kingdom, accepts and claims as part of its responsibility and public duty the function of tendering advice to the Government and the Council on all legislation, by-laws, and regulations pertaining to architecture and building generally." I have yet to learn that this Royal Institute of British Architects does claim as part of its responsibility this tendering of advice to the Government and other bodies. This is not a philanthropic institution. I take it that when the Government desires to erect a building, or some public body desires to erect a building, they consult their professional advisers, their architects and engineers, and they may be perfectly satisfied with the men whom they appoint. This Institute does sometimes intervene a little too readily when there is something to be done by some public body, and it would do well to be a little more reserved in tendering its advice to such bodies. Then further on, the petition says in paragraph 6: "Notwithstanding the representations made to the Council by these technical bodies, the Council have not to any material extent modified the proposals contained in clause 22 of the Bill." They modified them to the extent now in the Act. They did not modify them in the Bill, because they were desirous of meeting, as I have said over and over again, the various requisitions emanating from the Institute. You find now, in fact, very properly, that the skeleton framing of a building includes the retention of existing brick party walls. That is very essential in commercial buildings in London, and I am very glad to find that provision in the Act.

My next point is with regard to the architect's responsibility in connection with dry rot in buildings, and I propose, Mr. Vice-President, if you will allow me, to defer this, because I have taken the trouble to make some drawings exhibiting several methods of construction, a bad form of construction and what I conceive to be a good form of construction to prevent dry rot. Bearing in mind the serious losses that have occurred to architects in the last few years, and particularly in connection with the case of C. F. Shoolbred *v.* J. W. Wyles and A. Migotti, the matter is of the greatest importance. It may be there are germs in the wood itself which may be the cause of dry rot however much the floors are ventilated. Mr. Max Clarke wrote a letter to the *Builder* some few weeks ago which has elicited very important experiences on the part of other architects; and if the Council think it worth while some other evening, I should like to show you the various drawings I have made specially for this subject, as illustrating what I conceive to be bad and good methods of construction to prevent dry rot. But may I say I think it is necessary that architects should warn their clients in erecting buildings, at once and formally, that if they will insist on hermetically sealing the floors with kamptulicon and so on, they must not be surprised if dry rot occurs? Although this Institute, I am sure, would not be inclined to protect architects who may be guilty of incompetence or ignorance in the construction of buildings, I do feel that this question of dry rot is so serious that the Institute ought to take it up and consider what should be done to protect architects from being subjected to these actions at law, which cost so much money and bring into disrepute architects generally.

Then, on the necessity of assessors in competitions adhering strictly to the cost limits laid down by the promoters, I do not propose to refer to any individual case. I know that this is a subject that may be referred to the Competitions Committee; but I do say that one of the fundamental principles which should guide all assessors appointed by the Institute is that the cost laid down by the promoters, by the clients, as I may call them, should be strictly adhered to by the assessors; and I would suggest —I know it has been done in many cases—that when an assessor arrives at the conclusion that a few competitors are worthy of his further consideration he should call in a properly qualified quantity surveyor—adding the cost to his original fee, of course—to cube up all the buildings, certainly all the three designs that are proposed to be selected for prizes, and let the quantity surveyor advise him as to the proper price to be put down per foot cube of building; and if the cost ascertained by that quantity surveyor exceeds 5 per cent., say, of the sum laid down by the clients, the design, however good, should be immediately rejected.

Then as to the advertisements of "stores" and other firms, as regards the employment of establishment architects, it may appear undignified on the part of the Institute to interfere in these matters. But when you know, as I know, that Stores and other firms are trying to induce clients to build at a cost of many thousands of pounds, and say, If you employ us you will not have to pay an architect's and surveyor's fee, we know in this room, but the public does not know, that not only do they not save the 5 per cent. of the architect and the fees of the surveyor, but they pay 10, 15, 20, or 25 per cent. more than they would if they employed proper architects and surveyors. I leave it to the Council of the Institute to consider the subject, if they will, and to see whether any steps can be taken to inform the public that the statements made by these various Stores are not quite correct. I admit that it is a most difficult subject. I do not know whether you consider that you can deal with it at all; but I do know that the work done by these Stores and other firms is taking away from many architects their legitimate work.

The only other subject is to inquire what has been done by the Council in connection with the proposed new bridge over the Thames, and if you, Sir, will briefly let me know that I will make a few observations upon it.

The Chairman: The Lord Mayor and the Bridge House Estates Committee were asked to receive a deputation for the purpose of the views of the Institute being laid before them, and the reply is a favourable one—that they will receive us. That is practically the only communication.

Mr. Woodward: Then my suggestion is that, as the Corporation are about to expend certainly two millions, and probably two-and-a-half millions of money on this new bridge, I hope the deputation from this Institute will suggest that the bridge shall be put to public competition

among English architects and engineers. It has frequently been stated in this room, and I am sure you will all agree, that in the case of a bridge there is an opportunity for an amalgamation of the science of the engineer with the art of the architect. And this is a matter of extreme public importance. Bearing in mind what has taken place with regard to other bridges over the Thames, I do hope that this Institute, in appearing before the Bridge House Estates Committee, will not suggest any particular section of the Institute taking part in any advice, or any special conditions, with reference to this competition, but that it shall be thrown open entirely to English architects and English engineers, who may combine, and that there shall not occur again what took place with regard to the designs for the County Hall of the London County Council—that there shall be no favour whatever shown to any member of the Council or any particular section of the Institute, but that this competition should be publicly advertised, among English architects, excluding foreign architects.

That concludes the observations I have ventured to make. They have been made with the desire to show that some members of the Institute, at all events outside the Council, are alive, and I hope that the criticisms I have ventured to offer will be accepted by the Council, and will be of some interest to the general body of members.

THE CHAIRMAN: As regards the London County Council General Powers Bill, it would be quite unnecessary for me to put before the Meeting the views I hold either in connection with the Act now or at the time at which I had the honour of appearing before the House of Commons Committee in opposing certain proposed enactments; but I am perfectly sure that Mr. Woodward would be the first to agree that the modifications which are patent to him in reading this Act of Parliament and comparing it with the original draft are well worth a great deal more than the money and the time which we expended upon it without any payment whatever. As regards the matter of the architects' responsibility in connection with dry rot in buildings, I should like to tell Mr. Woodward that we have a Committee meeting on Wednesday for dealing exclusively with this business—we recognise that it is very important—and perhaps he would be good enough to lend us his drawings, so that the Committee may have the use of them in considering the subject.

Mr. WOODWARD assented and handed up the drawings.

THE CHAIRMAN: We should be very glad if at some future time Mr. Woodward will take an opportunity of bringing this matter before us again. As regards assessors of competitions adhering strictly to the cost limits laid down, this is one of the many vexed questions in connection with competitions which are continually cropping up. As a matter of fact the Council issue a paper to assessors as soon as they are nominated for any competition to try and guide them along the straight and narrow path of duty to competitors. With regard to the advertisements of Stores and other firms, I must say that the Council have from time to time, when any member of the Institute has taken work as the servant of these Stores, taken drastic steps with regard to it; but we cannot control, at present at any rate, men outside our membership, and until we do get to that day, which we are all hoping for, when practically all architects will be under our guidance, we must devise some other means to alleviate this very serious evil. I do not think I can say anything on the matter of the bridge. I have very great sympathy with the views Mr. Woodward has expressed. In a great project of this kind, involving a vast expenditure of money, and which to a certain degree involves the beautification or the disfigurement of one of the finest rivers in the world, I do really think some effort should be made to treat it in a magnificent and grand manner.

The Housing and Town Planning Bill.

The Housing and Town Planning Bill has now passed both Houses of Parliament, and awaits the Royal Assent. The following cutting from *The Times* will give some idea of the working of some of its provisions when the measure becomes law:—

HOUSES TO BE FIT FOR HABITATION.

Section 75 of the Act of 1890 enacts that in any contract for the letting of houses for the working classes it is to be an implied condition that the house is at the beginning of the holding in all respects reasonably fit for human habitation; but this section only applies where the rent does not exceed £20 in London, £13 in Liverpool, £10 in Manchester and Birmingham, and £8 elsewhere. Clause 14 of the Bill extends the application of this provision to houses at a rent not exceeding £40 in London, £26 in a borough or urban district of 50,000 or upwards, and £16 elsewhere. There are some 3,500,000 tenements of five rooms and less in England and Wales, and as these by no means comprise all the houses which will come within the purview of the section as now extended, it will be seen that the implied condition as to the fitness of dwellings for human habitation will practically apply to all working-class dwellings throughout the country. Clause 15, however, is more important still, for under that clause the implied condition as to fitness is to take effect so as to include an undertaking not merely that the house was fit for human habitation at the beginning of the tenancy, but that it shall be "kept fit" throughout the tenancy. And this undertaking is made enforceable by enabling the authority, if necessary, to do the work of rendering the house fit for habitation and to recover the cost from the landlord.

CLOSING AND DEMOLITION ORDERS.

Important as these provisions are, attention should be drawn to the amendments proposed by the Bill with respect to closing and demolition orders. Under the existing law recourse must be had to a Court of summary jurisdiction, the machinery is complicated, and there is an appeal to Quarter Sessions, while under the Bill the local authority may themselves make the order, and an appeal lies to the Local Government Board. The Bill also contains some other valuable provisions, such as the prohibition of back-to-back houses and cellar dwellings.

PROVISION OF NEW HOUSES.

Part III. of the Housing of the Working Classes Act, which enables local authorities to provide new houses for the working classes, and which at present is only in force where it has been adopted by the local authority, is by the Bill put in force throughout the country in every urban and rural district where it has not already been adopted. The powers thus conferred, however, might in some cases lie dormant unless there were a further power to compel their exercise when necessary. Consequently the Bill contains elaborate provision as to default. For instance, if a rural district council refused to provide necessary accommodation for the working classes of their district, the Local Government Board may, after holding a local inquiry, declare the council to be in default. The Board would then issue an order directing the authority to do what is required. This order is enforceable by *mandamus* in the Courts, or in the alternative the Board may with the consent of the county council impose on them the duty of making the necessary provision. In this connection it may be noted that the central authority may be set in motion not only by complaint of the county council or parish council or parish meeting, but by any four inhabitant householders of the district. The Bill also empowers the county council themselves to act in default of a rural district council, on the complaint of four inhabitant householders, by transferring to themselves the powers

of the district council. But while making necessary provision for enforcing the duty of providing adequate housing accommodation, steps have been taken to induce local authorities to carry out the intentions of the Bill by simplifying the procedure for acquisition of land and giving facilities for cheaper money. For example, land may be acquired compulsorily in rural districts in accordance with the simpler procedure introduced in the Small Holdings and Allotments Act of 1907. The period for which money may be lent by the Public Works Loan Commissioners has been extended from 50 to 80 years. The money is to be obtained at the *minimum* rate allowed for the time being out of the Local Loans Fund, and the longer duration of a loan is not to be taken as a reason for fixing a higher rate of interest.

MISCELLANEOUS.

Among other useful amendments made by the Bill may be noticed the repeal of subsection (2) of section 53 of the Act of 1890. In that subsection cottage is defined to include a garden of not more than half an acre, provided that the estimated annual value of such garden shall not exceed £3. By repealing this subsection and extending the definition of cottage so as to include a garden of not more than an acre, the limitation on annual value is abolished, and the authority are enabled to provide larger gardens in connection with cottages for the working classes. Public attention has more than once been drawn to the fact that large sums of money left by philanthropic testators for housing purposes are sterilised by inaction on the part of trustees or of the Court of Chancery. Under Clause 9 of the Bill, with a view to the proper application of such moneys, and, if necessary, the expediting of legal proceedings, the Local Government Board are empowered to certify any case of the kind to the Attorney-General, who can then intervene and take such steps as may be necessary in the circumstances.

THE POSITION OF THE LOCAL GOVERNMENT BOARD.

Among all these important new functions and powers, the position of the Local Government Board as the central authority has not been overlooked, and the President has indicated that all that is necessary will be done to equip the Board with an adequate staff for the carrying out of its new duties. The Board already possesses extensive powers with respect to the prescription of duties of medical officers of health and other sanitary officers, the form in which their reports &c. are to be made and recorded, and it has been intimated that these powers will be used to secure a standardisation and uniformity of administrative methods in connection with the survey and inspection of insanitary areas.

TOWN PLANNING.

The provisions of the Bill relating to town planning mark a new departure in legislation in this country. Hitherto new centres of population have been allowed to grow up, and existing urban areas have been allowed to expand, without control or provision. The result has too often been that the haphazard development of land in the vicinity of urban centres has produced slums, prevented the orderly growth of towns, and involved enormous expenditure in clearing sites, widening streets, and providing necessary open spaces. The Bill aims at securing in the future sanitary conditions, amenity, and convenience by enabling schemes to be made under which building land will be developed with due regard to future requirements. With this end in view the Local Government Board are empowered to authorise local authorities to prepare town planning schemes in connection with land likely to be used for building purposes, or to adopt any such schemes proposed by owners of land. The schemes are to have effect, however, only if approved by the Local Government Board. The Bill provides for the payment of compensation to any person whose property is injuriously affected by the making of a town planning scheme, and, on the other hand, the local authority is empowered to recover from any person whose land is increased in value by the making of the scheme a proportion of the amount of that increase.

Town Planning Systems.

Mr. W. R. Davidge [*A.*], in his Paper on "Town Planning Systems" read before the Surveyors' Institution on the 22nd ult., summed up his conclusions as follows:—

1. Each town must have an individuality of its own.
2. Natural assets, such as hills, woods, and water, must be preserved and extended.
3. Main lines of route must take direction required by traffic and contour of ground.
4. Geometrical planning must not necessarily be adopted as satisfactory.
5. Long straight streets, when adopted, should have a definite motive.
6. Slight curves or irregularities in frontage lines might, in many cases, be adopted with advantage.
7. Line of sight should, in most cases, be restricted within reasonable limits, *i.e.* lines of long streets, except as mentioned above (No. 5), should be broken, and all views should as far as possible be framed in a suitable setting.
8. The grouping or arrangement of the principal buildings and open spaces should in all cases be specially studied with a view to securing the best effect for the whole.
9. No planning scheme could be considered as complete without a sufficiency of open spaces, and due regard must be paid to proportion and to architectural design.

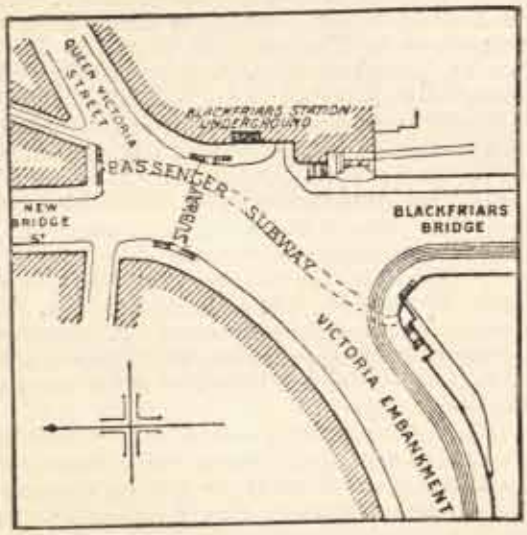
Conferences on Town Planning.

The National Housing Council are organising a series of meetings in order to educate the public on the housing question, and an appeal for £5,000 is to be made to meet the cost. The appeal will be issued to trade unions, co-operative societies, and the general public. Conferences at which the Housing and Town Planning Bill will be explained are to be held in London, Leeds, Sheffield, Newcastle-on-Tyne, Glasgow, Edinburgh, Manchester, Liverpool, Hanley, Nottingham, Oxford, Lincoln, Norwich, Ipswich, Birmingham, Bristol, Cardiff, Plymouth, and Southampton. At these special attention will be given to town planning. At a conference at the Westminster Palace Hotel on December 14 and 15 suggestions will be submitted as to the most practical lines of town planning procedure adapted to (1) great centres of population and (2) urban districts. Special attention is to be paid to the point of view of the local authority. A number of architects and others who have had experience of the subject in other countries have assisted to prepare a skeleton plan setting forth the best course for a local authority

to take in administering the Act when it becomes law. The methods of town planning adopted in France and Germany will be illustrated and explained at the conference.

The Blackfriars Bridge Subways.

The new subways at the northern end of Blackfriars Bridge, which were opened by the Lord Mayor last Monday, will be a great boon for pedestrians at this most difficult crossing. As will be seen from the plan, the subways radiate from a central point in four directions, with entrances at the north-west corner of the bridge, opposite the District Railway Station, near de Keyser's Hotel, and at the corner of New Bridge Street and Queen Victoria Street.



The long subway from Queen Victoria Street to the bridge will be especially convenient to tramway passengers. The work has been carried out under the direction of the Corporation, but the cost is to be defrayed by the County Council. The amount of the contract for the subways was £9,867, but a considerably larger sum has had to be spent in diverting to a lower level the numerous pipes, tubes, and sewers which cross and recross at this point. The total amount provided by the Council for all purposes has been £30,000. The work has been carried out by Messrs. Perry and Co., with Mr. Basil Mott as engineer, and has been in progress for a year. The subways are 10 feet wide by 8 feet high, and have been constructed as close to the surface as possible, their roofs being only 2 feet below the road.

The Wandle Improvement Scheme.

The Local Government Board has declined to sanction the scheme proposed by the Wandsworth Council for the reclamation of the banks of the Wandle and the making of public walks along the riverside.

The Treatment of Consumption.

An exhibition organised by the National Association for the Prevention of Consumption has been held during the past fortnight in the Chelsea Town Hall. Lord Cheylesmore, who opened the exhibition, said that since he was elected to the board of the Brompton Hospital twenty-five years ago the whole treatment of consumption had been revolutionised. At that period the temperature of the hospital was maintained at 63 degrees, but now the hospital was the breeziest place one could enter. Referring to the prevalence of tuberculosis among the Brigade of Guards many years ago, Lord Cheylesmore said that he served in that regiment for more than forty years, and remembered that they attributed the disease to the excessive night duty; but he could not help thinking now that it was due to the state of the barracks. The barracks in London were very little altered from the day that he entered them forty-four years ago. The men did not get sufficient cubic space, and the War Office might do a great deal to improve the present conditions. As a member of the committee for the Veterans' Relief Fund he visited the other day several of the workhouses, and in all his experience he had never seen barracks as good.

Many district medical officers have expressed themselves in favour of a sanatorium for Middlesex, and a movement is on foot to provide one. At a meeting held last week, on the invitation of Lord and Lady Hillingdon, at Hillingdon Court, Uxbridge, a 20,000 crowns fund was suggested to provide the first instalment of 30 beds, with an administrative block, towards the scheme of 100 beds, the management to be vested in governors nominated by each subscriber of 400 crowns. A resolution was agreed to approving the scheme and appointing Dr. Andrew Clark as local representative on the board of governors.

Preservation of the Whitgift Hospital, Croydon.

The Croydon street-widening scheme, which involved the demolition of the Whitgift Hospital, was defeated by 29 votes to 25 at the statutory meeting of the Croydon County Council on the 22nd ult. The article in the last number of the JOURNAL (pp. 75–77) had been brought to the notice of the Croydon authorities, and the voting doubtless was also considerably influenced by the announcement that the Royal Commission on Historical Monuments had intimated their intention of scheduling the building as "a monument most worthy of preservation." The Royal Commission had been happily brought into the question through the action of a Fellow of the Institute, Mr. C. H. Brodie, who resides at Croydon, and at whose instance Mr. Thackeray Turner, Secretary of the Society for the Protection of Ancient Buildings, had written to the Royal Commission asking if the building was among those listed for preservation. The reply was that the Commission had not yet

begun their investigations in the county of Surrey, but that they had good reason to believe that the Hospital would be on the list of selected monuments when the time came. Writing to Mr. Brodie himself, the Secretary of the Royal Commission said: "It is much to be hoped that your efforts will be successful. In a growing town like Croydon the value to the inhabitants of such a beautiful link with the past must be inestimable." The correspondence was published in the *Croydon Guardian* of the 20th ult., with a letter from Mr. Brodie putting the very pertinent question: "What is the use of spending our money on promoting a Bill asking Parliament to allow the destruction of one of those historic monuments which a Royal Commission appointed by itself says is 'most worthy of preservation'?"

Re-erection of Crosby Hall.

The Improvements Committee of the London County Council report that drawings have been received showing the proposed re-erection by the University and City Association of London, Ltd., of Crosby Hall, on part of lots 1 to 4, Cheyne Walk, which are surplus lands from the Battersea Bridge improvement, and on adjoining land. It is intended to use all those portions of old Crosby Hall which have been preserved. These consist of (i.) a moulded and panelled ceiling, (ii.) mullions, jambs, and tracery of windows, and (iii.) an oriel window and vaulted roof. A new roof will be constructed to support the old timbers, ceiling, and roof covering. The Committee recommend that, subject to compliance with the London Building Acts, &c., the drawings be approved.

THE A.A. CONVERSAZIONE.

The Annual Conversazione of the Architectural Association took place at Tufton Street on Wednesday, 24th November. The President, Mr. Henry Tanner, received the guests on the gallery, where a large collection of drawings, water-colours, and photographs were exhibited. The entertainment consisted of part songs sympathetically rendered by the members of the A.A. Musical and Dramatic Society, while Pitman's Blue Viennese Orchestra gave selections from "Tannhäuser" and "The Dollar Princess," &c.

The principal exhibits were drawings by the President of the Institute, Mr. Ernest George, the late Mr. John Fulleylove, R.I., kindly lent by Mrs. Fulleylove and Dr. Tebb, and the loan collection of the Corporation of the City of London. There were many water colours by architects of exceptional quality, notably, Limburg on the Lahns, Germany; Rothenburg, Strasburg, and views of Como, by Mr. Ernest George; Villa de' Medici, Rome; St. Etienne du Mont and the Panthéon, Paris; the Louvre and Institute, Paris; All Souls', Oxford; and views of Jerusalem, by John Fulleylove, of which the first mentioned in sepia was the best of his exhibits. Nor must reference be omitted to the drawings by Axel H. Haig illustrating three views of Wm. Burges' scheme for the interior decoration of St. Paul's Cathedral (1874), and two drawings by that other pupil of Burges, Mr. R. Phenè Spiers, one of some columns of the Parthenon, with warm tints, and a sketch of Rothenburg Rathaus Doorway. A view of Burlington Gardens with the Examination Hall, together with several others, was from the hand of W. Flockhart. "St. Mark's, Venice," and other fine water-colours were lent by Leslie Wilkinson; "A Back Canal, Venice," by C. Wontner Smith; several Venetian scenes, by Stanley Hamp; "On the Broads" and "Bruges," by Henry Tanner, jun.; views of Florence and Siena, by J. C. Powell; Canterbury, by J. B. Fulton; "Lympne Castle," by P. S. Forbes; "St. Mark's Baptistery," by Gerald Horsley; "Caudebec" and others, by Cecil C. Brewer; views of Haddon Hall and Hampton Court, by Cyril A. Fraser; "S. Giovanni, Lucca," and some London views, by Frank Lishman, were among the most interesting. The original drawings of "Penshurst Place," by the late George Devey; a water-colour of "Rye" and one of "The Test, Hants," by the late A. W. Weedon, R.I., and York Minster, by T. Hamilton Crawford, R.S.W., are selected as striking a note of the older school and making an interesting comparison.

In addition were sketches and water-colours by W. H. Seth-Smith of Seville; Guy Dawber of Castle Rising and Ribur Hall; Mervyn Macartney of a terrace wall; Percy May of a pergola; Sydney Newcombe's "Evesham" and "Great Baddow, Essex"; a cypress avenue and views of Siena Cathedral, by Charles Gascoyne; and many others by A. W. Bentham, Walter Millard, J. D. Stanford, Alf. Womersley, &c.

On the gallery were some bold pencil sketches of Haddon Hall and churches in Lancashire, Lincoln, and Notts, by F. H. Swindell; photos of the foreign tour to Rouen and Caudebec, with sketches by A. L. Snow, G. G. Wornum, and C. G. Boutcher. Mr. Wornum, who is the A.A. Travelling Student, exhibits also his drawings of "Richelieu" in fine ink line; these, however, lack the boldness of his pencil work. The A.A. Excursion to Gloucester was represented by photos, from the camera of Mr. A. W. Hennings, which is evidently quite a new departure, for Mr. Hennings has produced some delightful water-colours.

Other photos of the excursions to Banbury and Canterbury districts, were on view, and sketches of the Camera and Sketching Club, showing good work of the Association, while the measured drawings, illustrated by photos, in addition, by A. W. Robertson, of Kirby Hall, prove a valuable record.

The exhibition was, on the whole, very successful.

We would suggest for next year a representative collection of the works of the past school of architects' water-colours, such as the work of Cockerell, Axel Haig, Soane, Penrose, and R. Phenè Spiers, with perhaps the more finished drawings of the late Mr. John Fulleylove, in order that the students of to-day may see the care with which the works of that period were finished.

A. E. Bullock [*A.*].

THE AMERICAN ACADEMY IN ROME.

The American Academy had its origin in the American School of Architecture established in Rome shortly after the World's Fair of 1893. A group of artists who had been working on the Chicago Fair, hoping to raise the standard of national art, planned to give American students the opportunity to study the best classic examples under the most favourable conditions. The Palazzo Torlonia was secured for the home of the school, and Mr. Austin W. Lord appointed its first director. The students were mostly holders of such scholarships as the McKim, the Rotch, and the Stewardson Memorial. Within a year after the founding of the School of Architecture those interested became convinced that its scope should be broadened to include the allied arts of sculpture, painting, and music. Accordingly, representative American sculptors, painters, architects, and others interested in the project decided in 1896 to found an American Academy in Rome on lines similar to the French Academy. In June of that year the American Academy was incorporated under the laws of the State of New York. In 1901 the United States Government granted articles of incorporation and authorised the Ambassador at Rome to accept the position of trustee *ex officio* of the Academy. The ambassador was further directed to secure for the Academy all the privileges and exemptions that are given by the Italian Government to like institutions of other countries. The incorporators of the Academy included the leading architects, painters, and sculptors of the country, the presidents of the great universities and technical schools, the Secretary of State, and others interested in art and art education. The government of the corporation is vested in a board of eighteen trustees, three of whom must be architects, three sculptors, three painters, and nine laymen. The trustees select a director who acts as the executive officer of the corporation in Europe and superintends the work of the students. A large proportion of the million dollars required for its permanent endowment has already been subscribed.

The rules and regulations for competitions and work required are practically the same as at the French Academy. Competitions are open to properly qualified unmarried citizens of the United States. In the different arts the competitions vary a little, but in general they are all divided into preliminary and final examinations. In the case of the architects candidates are required to be (1) graduates of one of the architectural schools mentioned below; or (2) graduates of a college of high standing who hold certificates of at least two years' study in one of the following architectural schools:—Harvard University, Columbia University, Massachusetts Institute of Technology, University of Pennsylvania, George Washington University at Washington, Cornell University, University of California, Washington University at St. Louis, University of Illinois; or (3) Americans who have received the diploma of the École des Beaux-Arts at Paris. Competitors are required to do a fourteen-hour *en loge* problem, and from these sketches submitted the committee selects not more than four competitors for the final competition. The successful candidate is required to present himself in Rome on the first day of November following the competition. Each beneficiary receives his travelling expenses direct to Rome, and on the completion of his term of study receives his expenses to his home in the United States. One thousand dollars per annum is paid each pensioner, given as follows:—One hundred dollars is retained each year by the director as a reserve fund to the account of the beneficiary, which amount is paid to him on the completion of his term of study. Ten dollars per month is retained by the director to be paid to the beneficiary when he enters upon his annual term of travel in Italy or in other countries. Twenty dollars per month during the beneficiary's residence at the Academy is retained by the director as payment for board. The remainder after these deductions have been made is paid in advance to the beneficiary in equal monthly instalments. Studio and sleeping-rooms at the Academy are provided for the beneficiary without charge.

During the first year of their term students of architecture, sculpture, and painting are obliged to remain in Rome and Central Italy, and are not permitted to leave without special authorisation from the director. During the second year of their term they travel in Italy and Sicily; and during the remainder of their term in Italy, Sicily, and Greece, and in those countries where classic and Renaissance remains exist.

The beneficiaries are required each year to execute certain works which may be exhibited at Rome and thereafter sent to the Board of Trustees as records of accomplishment. Drawings, paintings, and sculpture may be retained by the Board of Trustees at their discretion as the property of the Academy. The architects during the first year are required to study classic art. They must execute a set of drawings of some antique remains with plan, elevations, section, and details. Collateral reading, travel in Italy, study at Pompeii, and such other places as the director approves are required. The second year is occupied mainly with the work of the Renais-

sance. Travel in Siena, Florence, and Venice is required. In addition, beneficiaries must execute drawings in co-operation with the painters and sculptors for the purpose of studying the relations of pictorial and sculptural decoration to architecture. In the third year beneficiaries are required to execute drawings of one of the following subjects chosen with the approval of the director: (*a*) the restoration of an antique building or a group of buildings in Sicily or Greece; (*b*) a city square in Italy, or group of buildings, with historical and descriptive sketch; or (*c*) a villa of the Renaissance period. The beneficiaries are also required to travel not less than a total of eight months in the third year. Should the Board of Trustees extend the scholarship of any beneficiary through a fourth year, a special programme for that year will be duly arranged.

Since 1896 various scholarships—as the Reinhart, Lazarus, Rotch, Stewardson, Appleton, McKim, and Technology—have been affiliated with the Academy. The home of the Academy is the Villa Mirafiori, built about 1874 by King Victor Emmanuel II. for the Countess Mirafiori, who later became his wife. It is about a mile from the Porta Pia, on the ancient Via Nomentana and on the edge of the Campagna, and is convenient, well appointed, and makes an attractive home. On the ground floor are the large hall, a grand staircase going up to the second floor, the director's office, library, large reception-room, dining-room for the director's family, the large dining-room for the men, rooms used for drafting purposes by the architects, and coat and service rooms.

ALLIED SOCIETIES.

Northern Architectural Association.

The Inaugural Address of the Fifty-first Session of the Northern Architectural Association was delivered by Mr. George T. Brown [*F.*], President of the Association, at Newcastle-upon-Tyne, on 10th November. Among local matters referred to was the question of the revision of the Society's by-laws. The suggestion had been made by Mr. Errington [*A.*], the Hon. Secretary, of the desirability of all the Societies allied with the Institute having a common basis for their by-laws. It should be possible, the President said, for representatives of the various Allied Societies to meet and agree on a common form of by-laws, which the Royal Institute could use as a model for other provincial Associations seeking to become allied to the Institute. There were many vexed points upon which a declaration set out in the by-laws would have considerable influence upon the actions of members in doubtful matters. Besides matters of more local interest, Mr. Brown touched upon the questions of Architects' Registration, Representation of Allied Societies on the Institute Council, Architectural Copyright, the Town Planning and Finance Bills. Speaking of Municipal Trading he said:—

One of the duties of such an Association as this is that of looking after the interests of the members of our profession by keeping an eye on anything which is likely to affect us prejudicially, and in doing what we can to prevent whatever we consider may be an interference with the custom of our practice. In doing so we are on very strong ground when such interference may also be calculated to act in a prejudicial manner with regard to the best interests of the general public. In this respect I would also like to refer to what I consider is a growing evil, not only in connection with the architectural profession, but one which also affects the building trade generally. I mean the tendency of municipalities to undertake work which we think we are justified in considering lies outside of their duties to the community. While admitting the possibility of our grounds of complaint being characterised as selfish ones by public bodies, it should not be forgotten that one of the reasons for our existence as an Association is that of self-preservation, and that we are justified in protesting against methods which may result in unfair treatment to ourselves, especially when they act also to the disadvantage of the purse-providing community.

It is obviously unfair to architects practising in any district that the designing of architectural work of a municipal character should be carried out by officials who have had no special training, who have been employed for different purposes, and who, in some instances, would gladly be relieved of such work, for which they are not properly equipped, and which they feel would be better in the hands of architects properly qualified to deal with it. The placing of such work in the hands of men of our profession, while it would only be an act of justice to them, would also have a tendency to secure the best interests of the ratepayers. An architect practising privately in producing plans has his own reputation to consider. It is either advanced or retarded by what he produces, and he is therefore the more likely to throw his own personality into it, both as to the designing and supervision of the general scheme, as well as the numerous details which arise during the progress of the work; and the success of the whole is likely to be proportionate to the nature and amount of this personal attention. It is highly probable that in the case of a public official as already referred to his ordinary duties are of such a varied and responsible nature that they must of necessity absorb the greater part of his time, thought, and energy: so that when a municipal surveyor is required to carry out public work he not only is unable to give it the personal attention which it should have, but it also becomes necessary to have an architectural staff at considerable cost to the ratepayers, and the tendency seems to be to retain their services when the need for them has temporarily passed away, which does not tend towards economy; whereas if the services of an independent architect were obtained the public liability to him is a fixed fee, and whether he retains a large or small staff, temporarily or permanently, is of no public concern. Even if there were an apparent saving of fees in the method I am objecting to, it would probably be more than counterbalanced by the economy in building obtained by expert planning and design. The fear is, however, that often the cost of professional services in public offices for architectural work is rarely apportioned with sufficient accuracy, so that it becomes a difficult matter for public bodies to say with accuracy that there has been any saving by the method they have employed.

Edinburgh Architectural Association.

Papers on the following subjects are to be read during the Session:—Materials and Treatment in Wall Decoration, by F. Morley Fletcher, Director of the Edinburgh College of Art, on 8th December; Mediæval Stone Carvings, by Andrew Muir, 15th December; The Practice of Architecture in Western Canada, by D. S. M'Ilroy, 12th January 1910; Architectural Form uninfluenced by Material: a popular notion to the contrary reviewed, by Alex. McGibbon [*A.*], 19th January; The Failure of the New Town Plan, by F. C. Mears, 2nd February; Architecture and the Poets, by Charles Ower, F.S.A. Scot., 9th February; Some Buildings and Defences of Ancient Sparta, by H. J. W. Tillyard, M.A., also on 9th February; Gothic Architecture, by D. Y. Cameron, 16th February; Heraldry as applied to Architecture, by J. Horne Stevenson, Advocate, 2nd March; Decoration, by Professor W. E. F. Britten, 9th March; Plaster Decoration, principally Handwork, by Thomas Beattie, Sculptor, 23rd March; The Spirit of Mediæval Art, by J. B. Stoughton Holborn, M.A. Oxon., 30th March. A Paper on "Geometry in its Application to Ancient Greek Architecture," by G. S. Aitken, read before the Association on the 17th November, will appear in a future issue of this JOURNAL.

Leeds and Yorkshire Architectural Society.

At the general meeting of this Society held at the Rooms, Park Street, Leeds, on 25th November, Mr. Percy Robinson [*F.*], President, in the chair, Mr. Martin Shaw Briggs [*A.*] delivered a lecture on "An Unknown Italian City." Mr. Briggs, who has been recently appointed an Extension Lecturer to Oxford University, introduced his "Unknown City" as Lecce, the Capital of the "Heel" of Italy. This district, although perfectly situated as regards railway service, has been completely neglected by tourists hitherto, and it was only by chance that the lecturer was invited by the Editor of the *Architectural Review* to visit Lecce in the spring of 1907, and to write for him a series of illustrated articles on its reputedly interesting buildings. So much material, interesting both from architectural and historical points of view, had Mr. Briggs found, that he decided to write a more extensive monograph, to be profusely illustrated, on the city and district, and to appeal to the general public under the title of "In the Heel of Italy." From the chapter of this book dealing specially with Architecture, the lecturer drew the substance of his Paper. Carefully tracing the historical causes, he pointed out the influences at work in Italy, and particularly in Southern Italy, contributing to produce a remarkable Architectural Period in this remote city, at a time almost synchronising with the career of Sir Christopher Wren. He discussed the suitability of the term "baroque," as applied to the building of this period; compared its characteristics in Lecce and better-known cities, pointed out its strong points and its more obvious defects, and urged the rare charm of a complete baroque city. Early examples of the middle of the sixteenth century varied in Lecce from a comparatively pedantic style to an extravagance of grotesqueness, far from pleasing, but in the later period a more settled style became noticeable, and it is this epoch to which Lecce owes the majority of its buildings. The details of this phase of architecture were noticed and some account given from contemporary writers, illustrating life in Lecce during the early eighteenth century.

In proposing a vote of thanks, Mr. W. H. Thorp [*F.*] remarked on the tendency of much of the work now being carried out in Rome to follow on the lines of the later baroque, while Mr. S. D. Kitson [*F.*] accredited the lecturer with having entered a strong plea for this much maligned style, a sentiment which was approved by the majority of those present.

MINUTES. III.

At the Third General Meeting (Business) of the Session 1909-10, held Monday, 29th November 1909, at 8 p.m.—Present, Mr. James S. Gibson, *Vice-President*, in the Chair; 34 Fellows (including 9 members of the Council), and 20 Associates (including 2 members of the Council); the Minutes of the meeting held Monday 15th November, having been published in the JOURNAL, were taken as read, and signed as correct.

The following Fellows attending for the first time since their election were formally admitted by the Chairman: Herbert Lionel Thornely (Plymouth) and Walter Ashbridge Chambers (Bombay).

The following candidates were elected by show of hands under By-law 9:—

As FELLOWS.

CHAPMAN: HENRY ASCOUGH [*A.* 1895] (Leeds).
GREEN: WILLIAM CURTIS [*A.* 1906].
HUBBACK: ARTHUR BENISON [*A.* 1905] (Selangor, Federated Malay States).
WEYMOUTH: RICHARD HENRY [*A.* 1889].

As ASSOCIATES.*

ADAMS: PERCY TIDSWELL [*P.* 1900, *S.* 1906] (Bournemouth).
ANDERSON: HERBERT COOPER [*P.* 1898, *S.* 1905] (Lancs).
ANTCLIFFE: WILLIAM CHARLES [*Special Examination*].
BARTHOLOMEW: BENJAMIN VINCENT [*P.* 1905, *S.* 1906].
BELL: WILLIAM [*P.* 1905, *S.* 1907] (Dundee).
BINNING: ALAN [*P.* 1902, *S.* 1905].
BODDINGTON: HENRY, Jun., M.A.Oxon. [*P.* 1905, *S.* 1906].
BOSS: ALBERT HENRY [*P.* 1904, *S.* 1907].
BRAZIER: FREDERICK HENRY [*P.* 1904, *S.* 1906] (Hale, Cheshire).
BRISTOW: CHRISTOPHER [*P.* 1904, *S.* 1905].
BROUGH: WILFRED JAMES [*P.* 1902, *S.* 1904].
CAMINESKY: PETER [*P.* 1903, *S.* 1905] (Manchester).
CARNELLEY: HERBERT [*P.* 1901, *S.* 1904].
CARUS-WILSON: CHARLES DENNY [*P.* 1904, *S.* 1908].
CATHCART: WILLIAM D'ARCY [*P.* 1906, *S.* 1908].
COCKRILL: GILBERT SCOTT [*P.* 1901, *S.* 1906] (Yarmouth).
CONSTANTINE: HARRY COURTENAY [*P.* 1906, *S.* 1907].
COOK: VINCENT CORBET [*P.* 1898, *S.* 1901] (Wolverhampton).
CORFIELD: CLAUDE RUSSELL [*P.* 1902, *S.* 1905] (Birmingham).
DAHL: JOHN LOVE SEATON [*P.* 1901, *S.* 1902].
DICKINSON: WILLIAM FRANCIS [*P.* 1902, *S.* 1904].
DOD: EDWIN JAMES [*P.* 1901, *S.* 1903] (Liverpool).
EDWARDS: ALBERT LIONEL [*P.* 1906, *S.* 1907].
EDWARDS: ALFRED HEWLETT [*P.* 1901, *S.* 1907].
FERRIER: JAMES STRATON [*P.* 1903, *S.* 1907] (Edinburgh).
FITZGERALD: GEORGE EDMONDS [*P.* 1905, *S.* 1906].

* Except where otherwise stated all the candidates passed the qualifying Examination in June last.

FLEMING: HERBERT SIDNEY [*P.* 1904, *S.* 1906].
GEEN: CHARLES ALFRED [*Special Examination*].
GRIEVE: JAMES [*P.* 1904, *S.* 1906, *Qualified* June 1908] (Liverpool).
GUTTERIDGE: REGINALD FOWLER [*P.* 1901, *S.* 1904] (Southampton).
HAGELL: FREDERIC WILLIAM [*P.* 1905, *S.* 1907].
HARRAL: WILLIAM HAIGH [*P.* 1903, *S.* 1905, *Colonial Examination* 1908] (Adelaide).
HARVEY: DAVID [*P.* 1903, *S.* 1908] (Hull).
HOTZ: ROLAND [*P.* 1906, *S.* 1907] (Simla, N.W. India).
JARVIS: JOHN WESTON [*P.* 1900, *S.* 1901].
JENKINSON: JOHN MANSELL [*P.* 1899, *S.* 1905] (Sheffield).
LA GERCHE: ALFRED ROMEO [*Colonial Examination* 1908] (Melbourne, Australia).
KAULA: WILLIAM [*P.* 1905, *S.* 1907].
KENCHINGTON: HERBERT [*Special Examination*].
LUDLOW: WILLIAM HENRY [*P.* 1889, *S* 1907] (Northampton).
LUSK: THOMAS YOUNGER [*Special Examination*] (Dunedin, New Zealand).
McLEAN: ARCHIBALD JOHN [*P.* 1904, *S.* 1907] (Montreal).
MADELEY: CHARLES STANBURY [*P.* 1904, *S.* 1906] (Birmingham).
MAIR: JOHN THOMAS [*Special Examination*] (Wellington, N.Z.).
MAXWELL: FRANCIS JOHN McCALLUM [*P.* 1905, *S.* 1906] (Capetown, Cape Colony).
MELLOR: WILFRID LAW [*P.* 1902, *S.* 1904] (Manchester).
METCALFE: CECIL BROADBENT [*P.* 1902, *S.* 1905] (Bradford, Yorks).
MITCHELL: GEORGE ARTHUR [*Special Examination*].
MOLE: HERBERT WILLIAM [*P.* 1904, *S.* 1907] (Newcastle-on-Tyne).
MORGAN: ERNEST EDMOND [*P.* 1905, *S.* 1908].
MORRIS: HENRY SETON [*Special Examination*].
PETCH: ERNEST SCOTT [*P.* 1901, *S.* 1905] (Scarborough).
PETT: HAROLD MILBURN [*P.* 1902, *S.* 1905] (Brighton).
PIERCE: ROBERT [*P.* 1904, *S.* 1906].
POWERS: ERNEST MARSTON [*Colonial Examination* 1908] (Melbourne, Australia).
PURCHON: WILLIAM SYDNEY [*P.* 1905, *S.* 1907] (Sheffield).
RAINFORTH: SYDNEY HERBERT [*P.* 1898, *S.* 1901] (Lincoln).
ROSE: CHARLES HOLLAND [*P.* 1904, *S.* 1906].
ROSS: HUGH ALEXANDER [*P.* 1904, *S.* 1907].
SAWYER: HAROLD SELWOOD [*P.* 1900, *S.* 1903].
SECCOMBE: HENRY EDWARD [*P.* 1900, *S.* 1904].
SEDDON: JOSEPH [*P.* 1906, *S.* 1907].
SHAPLAND: HENRY PERCIVAL [*P.* 1906, *S.* 1907].
SIMPSON: CECIL HAMILTON [*P.* 1904, *S.* 1905].
SMITH: FREDERICK RADFORD [*Special Examination*].
STEWART: DOUGLAS WILLIAM [*P.* 1902, *S.* 1907].
TASKER: WILLIAM WATT [*P.* 1903, *S.* 1907] (Newcastle-on-Tyne).
TURNBULL: ALBERT [*P.* 1904, *S.* 1906] (Durham).
UNWIN: HENRY [*P.* 1900, *S.* 1904] (Wigan).
VEY: GEORGE, Jun. [*P.* 1907, *S.* 1908]
WALLER: HERBERT [*Special Examination*] (Simla).
WARLOW: HERBERT GORDON [*P.* 1902, *S.* 1905] (Sheffield).
WATT: JOHN DOUGLAS DICKSON [*P.* 1902, *S.* 1906] (Falkirk, N.B.).
WILLIAMS: GEOFFREY HYDE [*P.* 1898, *S.* 1903].
WILLS: JOHN BERTRAM [*P.* 1902, *S.* 1904] (Bristol).
WINGROVE: GEORGE CHRISTOPHER [*P.* 1904, *S.* 1906] (Shanghai, China).
YOUNG: JOHN GIBTRIG [*P.* 1903, *S.* 1905] (Edinburgh).

As Hon. Associate.

POMEROY: FREDERICK WILLIAM, A.R.A.

The Secretary announced that by a Resolution of the Council under By-law 20 the following gentlemen had ceased to be members of the Royal Institute: From the class of Fellows, John Donkin, Charles Busteed Fowler, Edward Vigers; from the class of Associates, Edmund Blayney Clarke, James William Frazer, John Edward Spain, Frank Wilson.

A resolution, moved in accordance with notice by Mr. G. A. T. Middleton [*A.*], that reporters be admitted to the Meeting, failed for want of a seconder.

Mr. G. A. T. Middleton [*A.*] having explained the provisions of a Bill he had drafted for the Registration of Architects, and Mr. H. L. Thornely [*F.*] having spoken in support thereof, the Chairman promised that Mr. Middleton's proposals should have the consideration of the Institute Parliamentary Bill Committee.

Mr. Edward Greenop [*A.*], in accordance with notice, called attention to the unsatisfactory position of the present Institute Schedule of Charges, and its inadequate provisions for many of the circumstances arising in daily practice, whereupon, the matter having been discussed, on the motion of Mr. Greenop, seconded by Mr. W. H. Atkin-Berry [*F.*] it was

> Resolved, That in view of the inadequacy, ambiguities and deficiencies of the publication issued by the Institute entitled "The Professional Practice as to the Charges of Architects," the Council be requested to appoint a Special Committee to prepare a circular letter for issue to all Fellows and Associates inviting statements of any difficulties they may have met with in its use and suggestions for amendments; to take such other steps as the Committee may think fit, and to consider the whole question and report thereon at an early date.

Mr. Wm. Woodward [*F.*] having moved in accordance with notice that reporters be admitted to the Business Meetings of the Institute, the resolution, seconded by Mr. G. A. T. Middleton [*A.*], was put to the Meeting and negatived by a large majority.

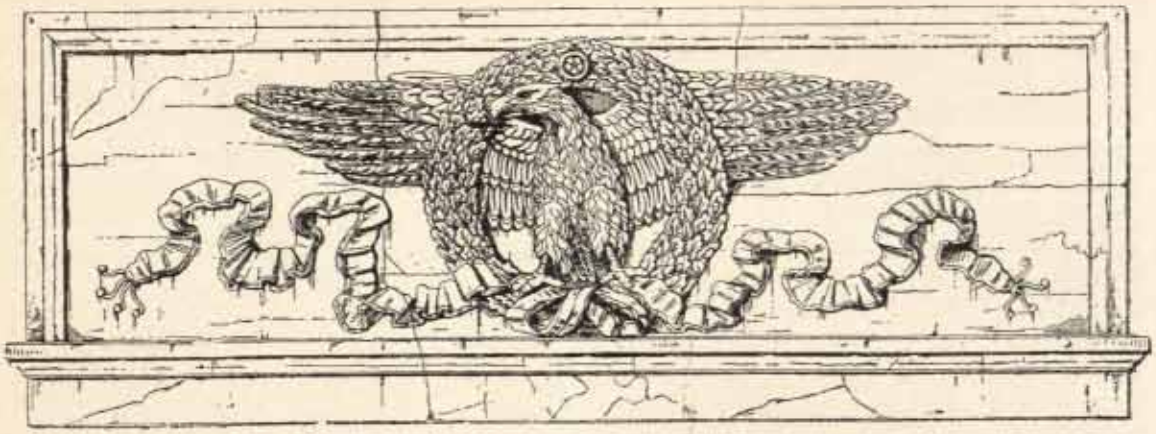
Mr. Wm. Woodward, further, in accordance with notice, discussed the following matters, viz.: (1) The London County Council's General Powers Bill 1909, and the note thereon on page 643 of the Journal for 24th July 1909; (2) Architects' Responsibility in connection with dry-rot in buildings; (3) The necessity of Assessors in Competitions adhering, strictly, to the cost limits laid down by Promoters; (4) The advertisements of "Stores" and other Firms as regards the employment of establishment architects; and finally asked for information as to what had been done by the Council in connection with the proposed new Bridge over the Thames.

With regard to (1) the Chairman pointed out that the action of the Institute in opposing the Bill had been justified by the important modifications in the measure which had resulted from such opposition.

As regards (2), the subject of dry-rot, Mr. Woodward having, owing to the lateness of the hour, asked permission to bring the matter forward at a subsequent meeting to enable him to submit drawings he had prepared exhibiting methods of construction to prevent dry-rot, the Chairman assented, and asked the loan of the drawings meanwhile for the use of a Committee already appointed by the Council to consider the matter.

The Chairman, further, referred to the steps the Council had taken with regard to the assessing of competitions and the employment of establishment architects by "Stores" and other firms, and stated that the Bridge House Estates Committee had consented to receive a deputation from the Institute on the subject of the new bridge.

The proceedings closed, and the meeting separated at 10 P.M.



ARCHITECTURAL EDUCATION IN AMERICA.

By A. D. F. Hamlin, Professor of Architecture in the School of Mines, Columbia University, N.Y.

Read before the Royal Institute of British Architects, Monday, 13th December 1909.

WHEN Constantine the Great, in the third decade of the fourth century of our era, decided upon the creation of a new capital at the mouth of the Bosphorus, he established a school for the training of the architects who were to design and erect its public buildings. This, the earliest organised school of architecture of which I have any knowledge, was a special device created to meet a special emergency. Through its means the architecture of Old Rome was transplanted to a new and provincial environment, and out of the seed thus sown grew up in a couple of centuries the splendours of Byzantine architecture. So far as we know, the school established by Constantine to meet a special and pressing need passed away with the emergency which called it into being. What its influence on Byzantine art would have been had it continued to exist is an interesting speculation, but a profitless one.

I have referred to this school, and to this speculative question which no one can answer, because there are certain analogies between the conditions under which architecture developed in Byzantium and in the American colonies, and because the question has been asked whether the creation of any school of architecture tends to help or to hinder the rational and free development of the art, whether in Byzantium or in America. In the American colonies, as in Byzantium, people belonging to an old civilisation were seeking to reproduce the arts of the homeland in a remote and provincial environment. Here, however, the analogy comes to an end. Byzantium, though provincial to the Roman mind, was already an ancient city, and the eastern empire of which it was the capital was itself full of the monuments of an elder art which had given lessons to Rome itself. The English, French, and Spanish colonists of America, on the other hand, were establishing themselves in new and virgin lands, destitute of cities, arts or culture except in those restricted regions in Peru and Central America where the Mayas and Incas had flourished and disappeared. When, under somewhat similar conditions, the wandering Dorians established themselves in Sicily and South Italy, they brought with them their own Doric architecture to a land not wholly unlike that which they had left behind them, and there was nothing to prevent their continuing to use the forms which they had already made their own. But for the Europeans in America, the difference between the old home and the new was tremendous, particularly in New England and Canada. The sundering waste of the ocean behind them, and the untamed wildness of the mountains and forests before them, made impossible any

textual reproduction of the architecture of the homeland. One most important circumstance impressed itself profoundly from the outset upon all their building operations. This was the necessary substitution of wood for the stone and brick in which they had been accustomed to work. In a forest-covered land, where every acre of tillage had to be won from the pines and oaks, construction in timber imposed itself as the only practicable and economical method of building. The habit of masonry construction disappeared for lack of opportunity for its exercise; and when, early in the eighteenth century, the first beginnings of true architectural art appeared, it was the architecture of Queen Anne, and later of the early Georges, interpreted in wood, not stone and brick, by carpenters and cabinet-makers, not masons. This Colonial American architecture, though British in its origin and relationships, and although much of the interior woodwork was no doubt made to order in England, the American builders developed into a genuine style of their own, full of refinement and charm, and suited to the material chiefly employed. Trained professional architects, however, there were none; a few standard books, like *Chambers' Civil Architecture*, and a well-established tradition gave coherence and unity to the style. The most accomplished designers of the time were often amateurs, like Dr. Kearsley, the architect of Christ Church, Philadelphia, and gentlemen often, no doubt, studied the Five Orders as part of their liberal education or as a fashionable accomplishment.

The first forty years of the nineteenth century witnessed a considerable architectural activity, greatly influenced in the late 'twenties and even through the 'forties by the English-Greek Revival. Many public buildings of the first importance were erected in the neo-Greek style, and granite and marble became the recognised materials for such buildings. This development demanded a far more highly trained class of designers than had formerly been necessary, and from sources which I have been unable to discover, the supply appeared. Both structurally and artistically the products of this period are often of very high merit, comparing favourably in design with much of the contemporary work in Europe. But their authors had studied in no technical school of architecture, and few had had any other training than that of apprenticeship to older practitioners and such learning as they could acquire from books. Few among them had seen the monuments of the Old World, for transatlantic travel was still costly and slow. The results they attained are doubly creditable when these limitations are remembered.

By 1840 the Gothic Revival began to extend its influence from England across the Atlantic, and more than one English architect, like Richard Upjohn in New York and Snell in Boston, came over the seas to give us the benefit of his home training in Gothic design. But there was no background of splendid monuments and picturesque ruins in America to stimulate interest in this style, nor even an architectural periodical, if we except two or three abortive efforts to maintain such a journal, none of which lasted longer than a few months, and most of which were pathetic in their poverty of material and illustration.

The Civil War period—from 1850 to 1876—was the period of darkest night for American architecture. Political conflict over the slavery question, mad speculation, and the sudden westward rush consequent upon the California gold discoveries of 1849, the horrible nightmare of the four years of Civil War, whose scars forty-five years have not yet wholly obliterated, and then ten years of most extraordinary industrial and political development—these wholly absorbed the energies of the American people. There was no surplus of time, strength, or attention to be devoted to the fine arts; and outside of Boston, which during this period was a true literary centre, there was hardly to be found anywhere in the United States a real artistic or literary atmosphere. Artistic taste was at its lowest ebb. With a few exceptions, the architects, so-called, of this period were destitute of that polite culture and of that artistic taste which had characterised the practitioners of the Greek and Gothic revivals. The taste of the people at large was utterly untrained and philistine. The prevalent methods and ideals of monumental construction

had degenerated equally with the decline in artistic taste. Architecture was a lost art, and there were few who appreciated or mourned the loss. It is hard to describe or to conceive the deplorable depth of the abyss into which the practice of building and the arts of design had sunk.

But it was precisely during this period that the forces and influences were gathering which were to bring about the coming reformation. The proverb was again to be verified that the darkest hour is that which precedes the dawn. With returning peace and increasing leisure, the amenities of the higher culture began to receive increasing attention. The tide of travel to Europe grew in volume yearly, and brought with each returning wave new influences making for a more refined taste and a more liberal culture. The narrowing chauvinism, if I may so call t, the provincial conceit of the American of that period, thrown back on himself by the ill-concealed hostility of Europe generally during the Civil War, began to break down, and the consciousness to dawn of the artistic poverty of American life and its environment. To this consciousness the Centennial Exhibition of 1876 at Philadelphia gave a mighty impulse. It was to two or three millions of people a revelation of the beauties and possibilities of the arts, especially of the industrial and decorative arts. Architecture gradually felt the same reviving influence. Museums and schools of art began to multiply with extraordinary rapidity throughout the land, and questions of artistic taste, and the discussion of statues, monuments, and buildings, began to occupy the public attention in the daily and periodical press. As this was the period of the beginning of my own architectural studies, I can testify from personal knowledge to the extraordinary force and universality of this artistic awakening. Out of this movement grew such great architectural schools as those of Columbia University and the University of Pennsylvania.

Already, however, out of the very blackest night of this philistine period, the first faint rays of the coming dawn had broken forth. The return of peace in 1865 had been followed by a sudden industrial awakening, especially in mining and the development of railway building and manufactures in the west. This led to the establishment of numerous technical schools, following the lead of Columbia College which had even in the midst of the war established its School of Mines in 1863. The great Massachusetts Institute of Technology was opened at Boston shortly after that date—I think in 1866. At any rate, in that year Professor William R. Ware, then practising in Boston, was charged to study in Paris the system and methods of the department of architecture of the Ecole des Beaux-Arts, with a view to obtaining data and suggestions for a similar department to be created by the Massachusetts Institute. Mr. Ware fulfilled this commission, and the new department was opened in September of that year, with Mr. Ware as its professor of architecture and director. Shortly afterward M. Eugène Létang was invited from Paris to become the instructor in design.

Five years later a similar department was established in the Cornell University at Ithaca, in the State of New York, in pursuance of the expressed wish of the broad-minded founder of that University, Ezra Cornell, that it should be an institution "where anyone could study anything he wanted to study." This department was placed under the direction of an accomplished scholar, Charles Babcock. A year or two later the State Industrial University of Illinois at Champaign, in that State, followed the example of Cornell, opening a department of architecture under the direction of Professor N. Clifford Ricker. It is a striking evidence of the youth of the American system of architectural school education that the three founders of these first three American schools are at this writing still living, so far at least as I am at present informed.

Thus at the time when the Philadelphia Exhibition marked the close of the Civil War epoch and ushered in the American Renaissance, there were in the United States three well-established schools of architecture, and these were the only organised and publicly recognised means for obtaining a professional training in architecture. But they could only suffice for a part of the

growing requirements of the profession ; the majority of draughtsmen still depended upon the haphazard drill of office apprenticeship, and many offices had to resort to foreign draughtsmen, chiefly Germans, owing to the lack of technical knowledge of the average office-bred American. The British system of office pupilage, with a fee to remunerate the architect for his personal interest and attention to his pupils, never obtained any foothold in the United States. The youth starting on his architectural pilgrimage by the office road began his career as office boy, and later was given the coarser work to do in tracing details. If he showed some cleverness of hand and eye, he was in time given the scale drawings to trace, and thus climbing the office ladder step by step, without help or instruction, as best he might, picking up what knowledge of the science of construction and of the art of design he could by an alert use of eyes, ears, and tongue, he might in a few years become a designer or a superintendent of construction, *tant bien que mal*, and I fear more often *mal* than *bien*. There were, however, one or two exceptions to the usual order. As far back as 1859 or 1860, the late Richard M. Hunt of New York, freshly returned from Paris, where he had distinguished himself in the Ecole, and under Hector Lefuel had worked on the designs for the new Louvre, opened a private *atelier* or studio in connection with his office, and received as pupils a number of young men who later became distinguished architects ; among them William R. Ware and George B. Post. These pupils he inspired by his infectious and unquenchable enthusiasm, and became to them a true master, *patron*, teacher and friend, so that this modest little *atelier* may be called the first nursery of architectural training in America, the germinant seed out of which has grown the whole great tree of architectural schools and of the American system of architectural education. For Hunt trained Ware, and Ware organised the school of architecture of the " M.I.T." (as the Massachusetts Institute of Technology is familiarly called), and later that of Columbia University ; and these have more than any others given shape and direction to the whole system, as will presently appear. Thus it is chiefly to these two men, Richard Morris Hunt and William Robert Ware, that we in the United States owe our organisation and the methods of our architectural schools. To say this is no derogation from the praise due to other men whose offices have been fruitful nurseries of architectural ability ; offices like those of the late H. H. Richardson and R. S. Peabody in Boston ; of Geo. B. Post, McKim, Mead and White, and Carrère and Hastings in New York ; of Daniel Burnham in Chicago, and many others in which men who later became highly successful received inspiration and practical discipline. But Hunt and Ware, whether or not they were exceptional men, did their work at an exceptional time. To pioneers belongs the credit of blazing new paths through the forest ; the later comers, however adventurous and capable, cannot share in their particular prestige.

The four schools I have mentioned—those of the " M.I.T.," of Cornell University, of the Illinois State University, and of Columbia College—did not long divide the whole field. In 1883 or thereabout the University of Pennsylvania added a college of architecture to its already numerous departments of instruction ; Syracuse University followed its example a few years later ; the George Washington University at Washington (formerly the Columbian) followed in its turn ; and the State University of California at Berkeley in that State did the same in 1899 or thereabout. About 1890 Harvard University established, in connection with its Lawrence Scientific School, a school of architecture, under the direction of Professor H. Langford Warren, after consultation with Professor Ware of the Columbia School, himself a Harvard man. This school has since been richly endowed and provided with a splendid building and fine equipment, and has a large registration, including many students from other departments of the University. In 1894 the " Society of Beaux-Arts Architects " of New York, composed of former students of the Paris School engaged in practice in America, began very quietly the development of a system of design-competitions which has extended till it covers the entire country, and has no doubt rendered a

valuable service in stimulating draughtsmen in offices, whether they have had any school training or not, to exercise their imaginations, perfect their draughtsmanship, and acquire, by competition with the cleverest among their ranks, a facility in design and drawing which perhaps no other discipline could give them. Numerous other agencies have taken up one or another phase of architectural training, contributing thereby to the supply of office draughtsmen possessed at least of the rudiments of a professional equipment. Some of these, like the Drexel Institute in Philadelphia, the Cooper Union in New York, and the Pratt Institute in Brooklyn, provide a fairly creditable and well-organised elementary curriculum—a good foundation for the student who proposes following up his studies in a university or technical college. Others, like the Young Men's Christian Associations, aim only at giving in evening classes, free or for a very low fee, instruction in office-drafting and plan-reading, for the special benefit of carpenters and builders and their apprentices, or of youths who desire to begin office work without passing through the earlier stages of office-boydom and indefinitely-prolonged tracing of full-sized details. This is true not only of New York and Boston, Philadelphia and Chicago, but of many cities of second and third-rate importance, especially in the eastern and middle western States. Though the training they offer is very elementary and often inferior in quality even within the narrow limits to which it is confined, it no doubt serves a valuable purpose in starting many a young man on a career of self-improvement, and opening perspectives of larger knowledge and wider usefulness to youths whose early life has been circumscribed and their education neglected.

These, then, are the agencies through which the aspiring youth may seek an entrance upon the architect's career: first of all the office and the uncertain chances of its unorganised apprenticeship; secondly, the evening classes of Young Men's Christian and Hebrew Associations and of various free evening High Schools maintained by certain municipalities; thirdly, the systematic courses of the Cooper Union, Drexel and Pratt Institutes, and like institutions; fourthly, the design competitions of the Society of Beaux-Arts Architects, with the help of the private teaching *ateliers* established in various cities by members of that society; and, finally, the architectural schools of the great universities and technical schools.

I propose now to discuss the organisation, methods and equipment, the curriculum and aims of the last-named group of schools. For it is in their wake that the other agencies have followed; it is owing to the higher standards of attainment and performance established and maintained by these schools that the demand has arisen for more intelligence and knowledge in the lower as well as the higher ranks of the office forces, and that these other agencies have arisen to supply that demand.

The first school of architecture was, as has been already stated, organised in Boston in 1866, as a department of a school of technology, and in part modelled upon the architectural section of the Ecole des Beaux-Arts in Paris. These facts are significant and characteristic. A school, with an organised curriculum, was a necessity because of the total absence of any regular and organised system of office apprenticeship. That it should be connected with a school of technology was but the logical consequence of two facts; first, that architecture requires, in common with engineering, a considerable amount of mathematical and purely scientific training, such as these schools were already providing, and that, indeed, on its purely structural side it is really a branch of civil engineering; and secondly, that there were no highly-developed schools of art prepared to supply any large part of the training required by the architect. Since, then, the Massachusetts Institute of Technology was already prepared to offer thorough courses in mathematics, mechanics, mechanical drawing, strength of materials, foundations, masonry and structural design, it seemed only necessary to add a professor who should teach the history of architecture and the theory of design, and one or two instructors in design and architectural

drawing and rendering, to complete the necessary staff of instruction. This was accordingly done, and the first American school of architecture was launched on its career.

But in organising the teaching of architectural drawing and design, what system should be followed, and whence should capable instructors be found? Although Professor Ware had strong leanings, in his own practice, towards the Victorian Gothic, then in the full tide of its popularity, he realised that he could not make of the new school a mere agency for teaching English Gothic design; and there was no institution in England for teaching architectural design upon which he could model any course of instruction in design suited to the needs of a highly-organised technical school. Of all the Continental European Schools to which he might turn for suggestions the great Ecole at Paris was the only one that promised practical results. The largest and oldest of them all, with its long-established and brilliant traditions, and the long roll of distinguished architects who had come forth from its ranks, it was the obvious model for study and imitation. Professor Ware's former master, Mr. Hunt, was one of its fruits, and if it had so filled him with enthusiasm what could be more promising for the success of the new course in design than to place it under the charge of some capable young man fresh from its inspiring influence? As there was then no American pupil of the Ecole available, M. Eugène Létang was called to the new post, which he filled acceptably for well nigh twenty years. It must be remembered that at that time—1866—the splendid work of Visconti and Lefuel on the New Louvre, of Duc on the Palais de Justice and of Garnier on the new Opera, was in full progress, that the transformation of Paris under Napoleon III. was not yet completed though far advanced, and that nowhere else in Europe was there any architectural activity comparable in splendour, brilliancy, and extent with that in Paris. It is not surprising, then, that in spite of the older traditions which led the architectural practice of the United States in the footsteps of the Mother Country, those who were seeking to raise a fallen art from her low estate should at this time turn to Paris rather than to London.

The results justified the experiment: the Boston School acquired a high reputation which it has maintained ever since, in spite of the multiplication of large and well-equipped schools throughout the country. After the death of M. Létang there followed a period during which the school lost somewhat of its pre-eminence in the matter of design; but in 1892 or 1893 M. Despradelle was called from Paris to the chair of design which he has ever since filled with conspicuous success, and from that date the M.I.T. School began to recover the lost ground. It stands to-day in the front rank, with but one or two rivals for the first place, and no small part of its continued success is due to the admirable and enthusiastic teaching of design by its accomplished professor from Paris.

The school at Cornell University and that of the Illinois State University at Champaign, Ill., paid less attention to design and to the artistic side of the course, and more to the practical and engineering sides. They did good and sound work, but in the nature of the case, remote as they were from the great centres of architectural activity, they were heavily handicapped in the competition with the Boston School, and later with that at Columbia University. Within more recent years, however, the Cornell School has remodelled its system and placed the teaching of design in the hands of French and American graduates of the Paris School, with the result of materially advancing in reputation and popularity.

In 1881 Professor Ware was invited by the Trustees of Columbia College in the city of New York—the institution which, founded as King's College under a charter from George II. in 1754, has since developed into the great Columbia University—to undertake the organisation and conduct of a department of architecture, upon the same general lines as that which had achieved such distinguished success under his guidance in Boston. That the proposed department should be attached to the technological faculty of the college which had grown up around

the School of Mines, already referred to, was a foregone conclusion. The invitation was accepted, and the new school was opened in 1881 with four students, in a gloomy room in an ancient building. Two years later the school moved into more adequate quarters in new buildings erected for the School of Mines, and in 1897 the entire institution, grown into a first-class university, was transferred to its present fine site and buildings on the Morningside Heights. The department of architecture, developed into a distinct school of architecture, though under the Faculty of Applied Science of the reorganised university, was in 1902 made an independent school, with a view to its later incorporation into a proposed Faculty of Fine Arts. This latest stage of its development was accomplished in 1906. These successive developments are significant of the gradual but steady growth of the appreciation of architecture as primarily an art, although involving in its practice exceedingly technical applications of the mathematical and physical sciences.

Let me now expose, more or less in detail, the plan of the Columbia course in architecture as representing the latest developments of the American system.

The present organisation of the course recognises three classes of students : first, those who aspire to the highest achievement in the profession, and to that end seek for a broad foundation of liberal culture through non-architectural studies before taking up their strictly professional courses ; secondly, those who, without this broader foundation, desire to pursue a systematic course of architectural study for three or four years and to receive a definite academic recognition of their attainment ; and finally, young men, already more or less experienced as draughtsmen in the profession, who desire to pursue special studies in architecture while unable to afford the time or expense of the complete curriculum.

Students of the first of these classes enter as candidates for the University degree and diploma of Bachelor of Architecture, upon completing, either at Columbia University or elsewhere, not less than two years of serious study in the ordinary A.B. course. Students of the second category, having had no collegiate training, are admitted upon passing examinations counting ten (or after 1910 twelve) " units," of which three must be in mathematics and one in freehand drawing, the other six being selected at will from the following subjects : mathematics, French, German, physics, chemistry, history, and English. The requirement thus technically expressed means nearly the equivalent of graduation from a first-rate non-classic high school at about eighteen years of age. The mathematics required for admission cover arithmetic, plane geometry, and algebra through the binomial theorem, series, and progressions. The English preparation required covers not only grammar and composition but acquaintance through certified reading with a selected list of the masterpieces of literature. These two items give an idea of the scope of the examinations, which are quite searching, and are conducted by a general inter-university board in June, in a large number of centres throughout the Union, and by the University itself in September in New York only. The third group are admitted without examination upon certification of having been for at least three years employed in architects' offices or in independent practice. Men of many years' experience sometimes avail themselves of this opportunity to make up for deficiencies in their earlier training or to profit by the latest instruction in architectural history or scientific construction.

Students of all these categories, without exception, must furthermore give evidence by work submitted, or by a special test examination, of a fair mastery of the elements of the Five Orders, shades and shadows and architectural rendering in Indian ink. Those who fail in this test, however, if otherwise prepared and admissible, are allowed to attend all class-room courses and are given a couple of months in which to make up the deficiency under this test before being allowed to join their class in the draughting-room. Columbia University is the only school which requires this preliminary test in draughtsmanship and the orders, and the proportion of those who pass it satisfactorily is still small, though yearly increasing. But the results in the school

of its enforcement are most gratifying, for the time spent upon these purely preliminary subjects is greatly reduced, and the student started by so much the earlier on the exercise of his creative imagination in design.

Students of the second category receive upon graduation a special diploma in the form of what is called the "Professional Certificate," but they receive no academic degree, and are not admitted to candidature for the M.A. and Ph.D. degrees. Those of the third group are called non-matriculates, and receive no academic certificate, though their passing of tests in the various courses they pursue is recorded in the University registers.

The curriculum leading to the degree of Bachelor of Architecture comprises the following groups of studies: (*a*) Mathematics and Engineering, comprising Analytical Geometry, Plane Trigonometry, the Differential and Integral Calculus, Mechanics, Graphical Statics, and Architectural Engineering—a specialised course in strength of materials and the calculations for masonry, columns, beams, and trussed constructions, arches and vaults, with specific problems to be worked out in full; (*b*) Architectural History, including a three years' course in the history of architecture and the history of ornament, with at least one year of readings in archæology and architectural history in French or German; (*c*) Office-work and specifications, comprising parallel courses in the materials and forms of building and in specifications, and a certain amount of certified work in architects' offices; (*d*) Drawing and modelling, exercises occupying from six to ten hours per week through the entire period of study, in architectural draughting, modelling in plasticine, and free-hand drawing, from elementary cast-drawing to life-drawing from the nude, and including a considerable amount of training in architectural water-colours; (*e*) Graphics, comprising advanced shades and shadows, perspective, descriptive geometry and stereotomy; and finally (*f*) Design, considered as the crowning feature of the course, the end and aim to which all other branches pursued are contributory. This course comprises lectures on the theory of planning, composition, colour, and decoration, and a graded series of problems beginning early in the first year of study and extending to the end of the course, culminating in the graduating thesis—the design of a building upon a programme selected by the student, upon which he prepares a fairly complete set of scale working drawings and specifications, with strain-sheets, calculations, and structural details of a given part of the edifice.

Many of the lecture-courses are accompanied by exercises in design or in individual research in the library, so that the student is constantly compelled to apply or to verify the theories set forth in the lecture-room, and to express himself both in writing and in drawings, lest the instruction should degenerate into mere pedagogical allocutions, and study into a mere memorising of words. This is particularly important in the historical studies, for the ancient monuments which are within sight or easy reach for every European student of architecture are mere names to the American until he has been compelled to study their plans and photographs and become acquainted with them otherwise than by mere description and a half-minute's glimpse of a slide projected on the lecture-room screen. Lantern illustration, under these conditions, must of course be made the most of, and the school collection of 9,000 slides is an invaluable adjunct to the 18,000 photographs and the thousands of mounted prints of plans, sections, and details, in the school library.

The methods followed in the teaching of design I will presently explain in some detail. But a word is first in order as to the curriculum for the Professional Certificate. In its general lines it follows that for the diploma; but it substitutes for the course in mathematics and architectural engineering given to the diploma students a somewhat simplified course in the application of graphical methods and of the elementary mathematics to the design and calculations of structures and their members, making large use of the tables and formulæ published in the various engineering handbooks. In this course also the amount of historical studies required is somewhat reduced, while the requirements in drawing and design are correspondingly increased. This

curriculum is therefore more exclusively professional than the other, but it is less extended, and both in the preparation required and in the studies prescribed partakes far less of the character of a liberal education. The graduate in this course, after the two or three years of office practice, which is recognised as an almost indispensable adjunct to and corollary of the University course, will find himself well equipped for general practice, but the University declines to recognise such a training as possessing sufficiently those elements of liberal culture which the bachelor's degree and diploma conferred by a University ought to connote; hence the substitution of the Professional Certificate as a new form of academic recognition, giving full credit for the three or four years of serious study which have led to it, but without the implications associated with a degree.

If it be asked why the University should establish such a course instead of requiring an identical preparation of all its students and granting but one form of academic recognition, the answer is found in the attitude of Columbia University, as a servant of the public interest, seeking to meet every real educational need that manifests itself beyond and above those of the secondary education, so far as its equipment and resources permit. And since the number of young men is large who cannot afford the time and expense of two years of collegiate study (*i.e.* in the Baccalaureate curriculum) in addition to their professional course, but who are earnest and gifted aspirants for an architectural training such as no office or minor school can give, the University has created for them the special provision I have described. It is the same generous spirit of service to the largest number that has prompted it to open its lecture-rooms and drafting-rooms to draftsmen and practising architects who desire to enter as non-matriculates in the manner already described.

I may here observe that Columbia University, which is the only institution requiring a test in the Five Orders and in sciography and architectural "rendering" for admission, is also alone in requiring two years of collegiate study for admission to its course for the diploma, and alone in offering a special curriculum leading to a professional certificate. All the other important schools of architecture admit to the course for the degree upon the passing of examinations (mostly under the General College Entrance Board) in subjects aggregating fifteen "units," as against the ten now exacted (twelve after 1910) for admission to the Columbia course for the certificate. They all also admit "special" or non-matriculate students. The curricula for the degree in architecture, in all the Universities and technical schools, resemble in general scope and outline that of Columbia University, though there is considerable variety in the time allotted to the several branches of instruction, in the emphasis laid upon one or another, in details of teaching and administration, and in the insertion of extra-architectural studies in the professional curriculum: such, for example, as general history, political economy, and the natural sciences. These have been omitted from the Columbia curriculum, first, because a fair proportion of them may be supposed to have been covered in the two years of collegiate study pursued before entering the school of architecture; and, secondly, because it is believed that more is gained in the end by concentration upon architectural studies during the period of architectural study, than is lost by the omission of these otherwise valuable subjects from the curriculum. Indeed, there are those who question whether, even if students could be induced to add one or two years to the period of professional study, it would be wise to devote any considerable portion of the added time to extra-professional studies instead of a still more thorough and extended discipline in construction and design. This is, of course, quite open to controversy, and the University authorities, recognising that all desirable subjects cannot possibly be crowded into a course averaging four years in duration, have simply made what seemed to them the wisest selection under the circumstances.

After all, architecture is an art of design. All the science and mathematics and office practice in the student's training are but a means to an end—and that end is the designing and erection of beautiful buildings. Architecture as a profession is the servant of the art of architecture, a means to the realising of æsthetic ideals in building. Design is therefore the ultimate and con-

trolling study of the course of discipline offered by the school; but it is that which offers the greatest difficulties and opens the widest door for controversy. After many years of experiment, the system followed in the Columbia school has shaped itself in the following manner.

The newly-entered student, already possessed of some slight acquaintance with the Orders and of the elements of drafting, is for three or four months subjected to a further drill in these subjects, in order to be able to express himself with some freedom in architectural form. The Orders are not treated as the sole language or the sole alphabet of the art, but simply as *one* form of architectural expression, and are carefully and thoroughly studied at the outset because there can be no free expression until one has mastered some one medium of expression. The remainder of the first year is then devoted to exercises in composing simple architectural structures with these elements: gateways, porches, vestibules, pavilions, and the like being the subjects assigned. The designs, carefully rendered with all shadows cast in Indian ink, are handed in at given times, and criticised and judged by some member of the school staff.

Upon the completion of a sufficient number of these introductory exercises—usually at the opening of the second year—the student is admitted to the lowest grade in the regular school competitions in design. There are three of these grades—the elementary, intermediate, and advanced. In each of these grades there are from five to seven or eight major problems given out during the academic year, and as many minor or sketch problems, the former requiring each from three to seven weeks for their completion; the latter one day only. The programmes for these problems are prepared by a committee consisting of the six teachers and honorary professors of design, who administer the three *ateliers* or drafting-rooms maintained by the University. The programmes are given out on a day set in the calendar, and the designs must be handed in on another set day, or they are not received at all. Shortly after this they are hung in a suitable exhibition hall, and judged by a jury consisting partly of members of the committee and partly of practising architects invited *ad hoc*. The jury awards *passes* counting three "points," *mentions* counting four points, and *special mentions* to exceptionally meritorious designs, counting five points; designs failing of a pass get no credit whatever. For the sketch problems only three or four passes, counting one point each, are usually allowed in any one judgment. A student is promoted from the elementary to the intermediate grade on acquiring nine points; thence to the advanced grade on acquiring fifteen points; and is permitted to begin his graduating thesis upon acquiring fifteen points in Advanced Design if a candidate for the degree, eighteen if a candidate for the certificate. The work on the thesis usually occupies two or three months.

In style and scale as to drawing and presentation, the designs of the two higher grades somewhat resemble those ordinarily seen at the Ecole des Beaux-Arts Exhibitions of current work, and are of fully equal average quality. But the tendency is away from imitation of Parisian models; more attention is paid to composition and proportion, less to mere draftsmanship; and the problems, while selected to give full scope to artistic expression, are all more or less practical and American in character.

Of the three drafting-rooms of the school, the largest is at the University itself; the other two are down-town, close to the offices of the architects who administer them, and who visit them three or four times a week for personal desk-to-desk criticism. By this system, borrowed in part from the French, and thus far adopted by Columbia alone, the teaching of design is divided among six architects, all in active practice, instead of being conducted by one or two men giving their whole time to the work and being thereby withdrawn largely or wholly from active practice. An element of friendly emulation, both between instructors and between their students, is thus introduced into the work in design, which contributes much to the enthusiasm and spirit of that work. Moreover, the work as a whole is conducted with the combined wisdom of six men of experience and standing in the profession, and thus prevented from falling into the ruts which are apt to be

worn when but one mind for long years controls a department of study. The results so far—the system has been in operation five years—have been very gratifying. The improvement in the variety, imaginativeness, facility, and maturity of the designs produced and in the progress made by individual students has been very marked. The personal quality of the instructor has the fullest scope for influencing the pupil, and as far as seems practicable the advantages of the system of teaching by apprenticeship are combined with those of University administration and classroom instruction. Design can, of course, no more be taught in a classroom or by lectures than can the writing of poetry or the acquisition of a pure and noble literary style. But the University can teach certain laws and principles of design, as it can teach the laws of scientific harmony, though it can never create composers of music. It can acquaint the student with the great masterpieces of his art, and surround him with an atmosphere which will at least assist him in the training of his taste. It can give him problems of design to solve which will stimulate his imagination and tax his invention, and provide him with masters whose criticisms and suggestions will aid him in learning how to attack and how to solve a problem ; but the results must depend on the student himself. The Columbia system is directed towards providing first that foundation of knowledge and science on which good architecture must always rest ; and, secondly, that environment of opportunity and stimulation which shall make it possible for the student to realise the best and highest in him, and to develop those powers and faculties whose exercise is essential to success in design.

In the school of architecture of Harvard University there is but one general university *atelier*, but the giving out of problems in design and the criticism of the work are successively assigned to different architects in active practice. Thus variety of ideas and personality in the instruction are ensured, though the element of continuity is somewhat sacrificed, and there is no opportunity for the development of that emulation which results from the maintenance of three distinct *ateliers* as at Columbia. At the other schools the design is under a single professor with one or more assistants. At most of the other schools, moreover, the course is fixed at four years ; while at Columbia it is of indeterminate duration, the student graduating when he has acquired the prescribed " points," so that the ambitious and highly capable man is not held back to the pace of the average, nor the faithful but slow plodder made to feel disgrace at not completing his programme of work within a rigidly-fixed limit.

It is impossible within the limits of this paper, already longer than I had anticipated would be necessary, to set forth in detail the methods employed, at Columbia and elsewhere, in the teaching of the various subjects I have mentioned, or to describe the material equipment of these schools. I can only make one or two very brief explanations with regard to the school which I have the honour to direct. I have referred to the course in specifications and materials and methods of construction. This course comprises two sub-courses of lectures illustrated by lantern slides, by models and samples, and by a remarkable series of large diagrams of modern American construction constantly revised to date. It is accompanied by fortnightly exercises in structural design occupying the entire day, and is supplemented by the requirement that not less than one month of each long summer vacation be spent in an architect's office. This seems a very small requirement, but it is surprising how much the student picks up of practical knowledge in the three summer vacations of his course, and how valuable this proves in conjunction with the two courses of lectures I have mentioned. Moreover, he cannot graduate until he has given proof of real proficiency in this field by the thoroughness and completeness of the drawings and specifications of his graduating thesis.

Usually, on graduation, the student does one of these two things : he goes to Paris or Rome for a year or two, or even more, of study of design under foreign masters or of travel among the monuments, before entering the mill of office work ; or he goes directly into an architect's office at a fair compensation to spend a few years under its discipline in acquiring that experience which

alone can assure him success in the independent practice of his profession. The University expressly disclaims to produce trained architects in four years of study. Its graduates on leaving the academic halls stand in precisely the same relation to the profession as the young medical graduate or the graduate in law. Each of these has received his academic training, his equipment of knowledge of theories, of principles, and his first beginnings of their application: each goes to the hospital, to the eminent practitioner's office, to the grind of law-chambers under others, for years before he ventures on independent practice. So is it with our architectural graduates, who are, be it said in passing, almost always *personæ gratæ*, even *gratissimæ*, in the offices of their elders.

With regard to the tide Paris-wards of our architectural graduates, my opinions are already on record in both American and English professional periodicals. The brilliant reputation of the Paris school, the fifty years' tradition of its advantages for American students ever since the days of Hunt and Richardson, the influence of the Beaux-Arts Society and its competitions, and the glamour of the affixed title of *Diplômé de l'Ecole des Beaux-Arts*, all tend to draw Paris-wards the young American graduate who desires to visit the Old World or to acquire further discipline in design. But the Columbia University School seeks to discountenance the waste of time and duplication of work already done, involved in acquiring the Paris Ecole *diplôme*. We have sought to persuade our young men that the best that Paris can offer can be acquired by the graduate of an American school in a year or eighteen months, and without entering the Ecole itself; and that one year in Paris and one year of travel, half on classic soil and half in England and Germany—two years in all—are of more real educative value than three years spent in acquiring the French *diplôme*. Our own American schools are now offering post-graduate courses in design which are credited in part towards the higher degrees of M.A. and Ph.D., and several of them offer travelling scholarships for graduates, with or without conditions as to where the foreign study or travel shall be. Thus the young graduate has before him abundant opportunities for prolonging his studies and for the practice of inventive design without resorting to the *ateliers* of the Paris school. But the tide is too strong to be stemmed at once, and too many of our graduates still imagine their future prestige assured if they can only *décrocher le diplôme*, as they sometimes phrase it. Yet the signs are growing of the conviction that the great Ecole des Beaux-Arts is not after all the only gateway of artistic and professional salvation, and in time we may hope to see the Paris sojourn reduced to its proper scale in the student's perspective and given its real and true function and dimensions.

I cannot close without a word as to the work of the Society of Beaux-Arts Architects of America. It numbers now some two or three hundred members, scattered through the Union, and including some of the most distinguished of our younger and middle-aged architects. Its very active committee on education issues each year, according to a carefully prepared calendar, two classes of problems, each comprising seven or eight major problems and as many *esquisse-esquisses* or one-day sketches. The printed programmes for these are given out on a set day at a dozen or more centres in different cities, under a representative, in each place, of the Society, who gathers the sketches (the competitors retaining tracings of them) and sends them to the New York office. Anybody may compete; the majority of those availing themselves of the privilege being young draftsmen in the offices, who work upon the designs at night, in *ateliers* conducted by themselves under the direction of a patron or critic belonging to the Society. A select jury judges each set of designs, awarding medals and graded mentions, and the highest premiated designs are published in one or more periodicals.

A course of training in these competitions is not, of course, the equivalent of an architectural education, but it is of undoubtedly great value to those who pursue it. The exact extent of the benefit to be gained from so doing depends on the student himself; much also on the character

of the problems and on the attitude of the juries. It is not surprising that French ideas prevail in both these points, and that the tendency has been to encourage the competitor to study modern French work and Ecole drawings in preference to more classic models, and to foster a certain virtuosity of draftsmanship at the expense of the more careful study of proportion and composition. Yet the judgments are more catholic than those at the Paris school; originality of conception when sound and well-carried-out is frequently rewarded; and oftentimes the student, realising in the end that further progress requires a broader foundation of knowledge and intellectual discipline, finally enters one of the great schools of architecture to obtain what the "Beaux-Arts concours" can never, unaided, give him.

I have thus sketched, in a very summary and I fear incomplete way, the history and methods of architectural training in America. I am well aware that such a sketch as I have made raises more questions than could be answered in several hours. Indeed, many of the questions it raises have not yet been answered, either in America or anywhere else. We are fully aware of many of the deficiencies of our own system; we are at work on many problems still unsolved. How far, for instance, should the training in design be disciplinary, how far practical? To what extent should originality be encouraged, and to what extent subordinated to a rigid training in proportion and composition, using the more familiar and established forms of architecture as the alphabet? What is the best means of training the taste? What is the real value of lecture courses on the theory of planning, composition, decoration, proportion? Should the purely intellectual and cultural discipline of the present schedule be enlarged, to give broader foundations, or reduced, to allow of more practical and intensive teaching? How much engineering ought a young practitioner to have mastered before leaving the school? On all these and other questions widely divergent opinions exist in the profession itself as well as among University educators, and there is constant pressure from opposing forces. Our present methods in America are the resultants of these forces; they appear to us the best compromises, on the whole, that we can make. Fortunately we are not, either in the Universities or in the technical colleges, bound by rigid traditions. Our systems have changed greatly in twenty years; our hope is that they may always remain sufficiently flexible to respond to changing conditions and new requirements. Only thus can architectural training be made to build up a living art.

ADDENDUM.—To my great regret I find that the papers and examples of students' work I had left in New York to be forwarded to me in London have not arrived, and I must depend upon my memory for such statistics as I shall venture to give you, under all reservations as to their accuracy. There are, as nearly as I can gather, fifteen schools of architecture in the United States which offer a full curriculum leading to a degree and diploma of Baccalaureate grade. These, with the approximate registration of such of them as I have been best acquainted with, are as follows:

	Students 1908–09.
Mass. Institute of Technology	120–140
Cornell University	80–100
Illinois State University	—
Columbia University	140
University of Pennsylvania	150
Syracuse University	—
Harvard University	100–120
George Washington University (Washington, D.C.)	—
Washington University, St. Louis	—
University of California	—
Armour and Art Institute at Chicago, affiliated with the Chicago University	—
University of North Carolina	—
Alabama Technical Institute	—
Tulane University, New Orleans	—
Michigan University	—

In addition to these, the Cooper Institute at New York provides a five years' course of evening study, leading to a diploma, but this is hardly a real school of architecture, its emphasis being laid upon the practical and trades side rather than the artistic side of architecture. Its graduates

make fairly good draftsmen and superintendents, but I have rarely or never heard of their reaching the higher walks of the profession.

I should like also to add a word as to the influence of the schools upon the art of architecture in the United States, endeavouring in this to detach myself as far as possible from the point of view merely of the director of one of these schools. I think the verdict of history will be that this influence has been salutary, making for a broader culture and for higher standards in the profession, and that the notable progress of American architecture in the last thirty years has been very largely due to the development of the schools in which our men have been trained. By far the greater proportion of the notably successful practitioners of, say, fifty-five years and under in age now in the ranks are school men, and the proportion is increasing. The great defect, if any, in our system at present is its too great dependence upon Paris ideas, ideals, and men; and the consequent lack of originality, of initiative, of freedom in matters of style. Yet this fault is gradually being amended, and, after all, it has seldom reached the point of slavish imitation of French work except in the hands of young and inexperienced men: on the whole, American work is widely different from French work. But I hope to see, in the next few years, a greater independence in the work of our school graduates and in the work of the schools themselves: above all, I hope to see a greater regard for materials and their several capacities for expression; for the United States are especially rich in superb building materials which lend themselves admirably to distinctive modes of design and special details. I also hope to witness in the near future, alongside of the architectural training, a great advance in the resources for training decorative sculptors and painters, and an increase in the opportunities for employing them. Much otherwise very excellent monumental architecture in America suffers from inadequate enhancement and vitalising by monumentally decorative sculpture and decorative painting, and I hope the importance of this will be more and more appreciated and dwelt upon in all our schools of art, including those of architecture.

DISCUSSION OF PROFESSOR HAMLIN'S PAPER.

Mr. Ernest George, *President*, in the Chair.

Professor HAMLIN, before reading his Paper, addressed the meeting as follows: Mr. President and Gentlemen, I should like to say a word personally and familiarly to express the delight it gives me to appear before you, and the honour that I feel has been conferred upon me by the invitation to read this Paper. The Royal Institute of British Architects is well and widely known in the United States, and held in the highest honour and esteem; and what has been a very peculiar pleasure to me, and I trust will continue to be a great pleasure in its further development, is the fact that I am now becoming acquainted with many whose names have long been familiar to me and to many of my colleagues in the profession in the United States, by reason of their admirable work and their many contributions to the history, to the theory, and to the general knowledge of architecture. These have largely been names to me in the past; now they are becoming living entities, and many of them already personal friends. It is therefore not only a great honour that I feel in coming here, but it is an extreme personal pleasure, the intensity of which I am not able adequately to express.

Mr. T. G. JACKSON, R.A., rising at the President's call after the reading of the Paper, said he had listened with very great pleasure to the extremely clear and complete account Professor Hamlin had given of architectural training in his country. The system, he understood, contemplated three classes of students. The first, which he would call Class A, had to go through a course which led to a diploma in architecture; it embraced a two years' course in general subjects unconnected with architecture, such as are required for a degree in Arts. The second—Class B—was a course leading to a certificate, but with no degree, confined to architecture only: and more stress was laid on architecture in this than in the former class. The third—Class C—was general teaching for men already at work in architecture but wanting to improve themselves in their profession, who got no certificate at all. It seemed to him that Class A was based on a confusion of ideas. General

culture, a liberal education, was one thing, but architectural training was another. That a man should graduate in Arts in the usual way and afterwards proceed to the study of architecture was intelligible enough: it happened often with good men who had been to Universities and afterwards entered an architect's office and studied architecture with very great advantage. But to treat study which qualified for a degree in Arts as part of an architectural curriculum seemed to him a sort of intellectual muddle which mixed up two different subjects entirely; and he could not help thinking that it was inspired, if he might suggest such a thing, by a motive of which they had had instances in this country—trying to give a sort of adventitious respectability and dignity to the profession of architect by the possession of an architectural diploma, which in his opinion was an entirely fictitious distinction. Coming to the second class, strictly architectural teaching was more thorough than in Class A. It was more exclusively professional than the other—it was less extended, both in the preparation required and the studies prescribed, and partook less of the character of a liberal education. More time was given in this class to actual architectural teaching than in the first. The last class of all was confined to the simple practice of architecture by men who already knew something of it. This, he should imagine, was an extremely useful class—perhaps the most useful of all three. He was the last person in the world to decry general culture. He would have a man as well cultivated and as well educated as he could possibly be; for the sake of the individual man, the more he knows, the more he is cultivated, the greater is his intellectual pleasure and the greater his usefulness to mankind; for the man, no doubt, general culture is a thing to be desired. But general culture would never make a man an artist. Looking at history and the careers of great artists, painters, and sculptors, it would be found that in most cases they had risen from the ranks. It was much the same with great architects. In classical times many of the great architects were slaves—though slaves were sometimes educated as well as their masters. Great philosophers had been slaves. The masterpieces of mediæval art, he imagined, were all built by men whom they should call illiterate. In saying this he did not mean in the least to decry the advantages of culture. All he meant to say was that the influence of culture upon art in the individual artist was indirect, not direct. He did not think by attaching any scheme of general culture as of necessity to the training of an architect they were doing any good at all, and for that reason he could not help thinking that there would be quite as much hope, if not more—he rather gathered from something the lecturer had said that this was so—that from the two University classes which carried no University decoration one might look perhaps for better architects than would be produced by the first class which carried with it a greater distinction. Might he say, too, that he thought there was too much stress laid on mere technicalities and scarcely enough on design. That mathematics might be useful to an architect in certain conditions he could quite understand; but, if he might speak for himself, he confessed with shame that his mathematics did not go much beyond the first four rules, and though sometimes he might venture into a higher rule, he did it with diffidence. Nevertheless, those rules were enough to enable one to know the weight one had to carry, and the strength one had to provide for, and then there were a few humane people who were considerate enough to provide tables for ignoramuses like himself, and these he always found sufficient for the purpose. Hence, though he did not want to decry mathematics, he thought it was not necessary to lay so much stress upon it as was done in this curriculum. There were so many things now that an architect had to learn that it was impossible for him to become expert in all; and he thought any architect who was wise, when considering the heating and ventilation of a building, for instance, would send for an engineer to aid him in writing the specification. The same with all electrical matters, and with any exceptionally difficult problems of drainage, he thought that an architect who was wise would feel that the time had come when these matters were too intricate and complicated, and so much beyond what was actually architecture, that if he did it entirely himself he would probably do it very badly, and it was much better to take advice from those who had made it a study; therefore the architect's studies in those directions need not go so absolutely into details and particulars as was contemplated in some of these curricula. There was one thing on which they all felt with Professor Hamlin, the difficult position of students of architecture who had no old buildings in their own country. It had often seemed to him that in that very fact, in the inexorable conditions of space and time and circumstances, there was a suggestion that one had always hoped that American architects would take advantage of. He could not help thinking that, although they knew very well that all styles must be developed from preceding styles—old architecture—that no art ever came into being of itself fully equipped—still the examples of the Old World had been so long studied in America, and had produced so many good architects of originality who had done interesting work—and they might expect from their successors work of the same kind—it had often occurred to him that the time had come for Americans to shut the book of old European architecture and to follow their own career, developing the good work which had already been done by their own sons in their own country, and not to look everlastingly across the ocean for

examples in the old country. Perhaps they might hear something of that from Professor Hamlin.

PROFESSOR REGINALD BLOMFIELD, A.R.A., said that, before offering any remarks on Professor Hamlin's Paper, he should like to say how glad they were to have Mr. Jackson at the meeting that evening. Mr. Jackson had not always seen eye to eye with the Institute on matters of general policy, but with regard to matters of education he had always been with them an enthusiastic advocate of it, and had given a great deal of time and trouble to it. It was a proof of the importance of this subject that a man of Mr. Jackson's distinction should come among them and give his views on the question. He (the speaker) was not in agreement with all Mr. Jackson's views. He did not think that historically he was quite correct in what he had told them on this matter of general culture, because only last Christmas they had it on the authority of the Architectural Association play that Ictinus was a tremendous fellow! Coming later down the ages, the architects of the Renaissance were men of reasonable culture, and some of the most characteristic among them were highly educated men. Professor Hamlin's eloquent address was a most admirable exposition of, he supposed, the latest light on the education of the young architect of America. He might have had something to say upon it, but unfortunately he had lost his notes, and must limit his remarks to three points that occurred to him. The first was on the general question which Mr. Jackson had touched upon in a very interesting and a very sound way, namely, the distinction between technical instruction and education. It was evident that in America they believed in architecture, that is to say in technical subjects, as what Professor Hamlin called a matter of liberal culture. We had come really to this point in the matter—there were two ways of looking at education; it was intended either to train the mind, or to pile up in the mind a certain quantity of knowledge. Old-fashioned educationalists said that the whole object of education from youth upwards, and before entering upon special study, was to train the mind. We had then to consider was this architecture, this technical study, as good a method of training the mind as the older and more accredited subjects? Here, again, the advocates of the older methods of education said unhesitatingly that it was not. It was on this ground that they did not wish that it should be introduced into the curricula of our Universities. The next thing would be we should have it in our public schools—we should have boys dropping their education at fourteen. At any rate it seemed to him, and to much older and wiser men than himself, that architecture as a medium of education was inferior to the older methods of mental training. And in the second place there was a practical point with regard to the architect himself. These young men ought to come into an architect's office, and personally he should prefer to have in his office a young man who had gone through the best education he could in general subjects, rather than have a young man who had had a very partial education and had then overlaid it by an imperfect technical education—that is to say, one would prefer to impart such technical instruction as one could to a well-trained mind rather than to an ill-trained mind. There were two other points he should like to call attention to. In the system of training as it was handled in America, and as it had been described to them in Professor Hamlin's address, they did not appear to lay stress on draughtsmanship—and he was very much surprised that that was so, knowing how magnificent some of the American draughtsmanship was. He supposed it was there implicitly, but he did not find any great stress laid upon it in Professor Hamlin's address. The American system in the main—though he was glad to learn from Professor Hamlin that it had been modified in a more practical direction—followed the Beaux-Arts curriculum; it followed the lines laid down by that prince of professors, Blondel, who 150 years ago had perfected and originated a course of instruction in which all these studies were clearly detailed. He fancied if they looked at Blondel's syllabus they would find that it was on all fours with Professor Hamlin's own. Yet in Blondel's time draughtsmanship was made to a large extent the basis of their training. He was afraid that in England, owing to a misunderstanding, they were losing sight of that. Some years ago a great effort had been made to reorganise architectural training in this country, and so much stress had been laid on technical matters of construction that they had rather overlooked the importance of draughtsmanship. He felt himself that in architectural training this draughtsmanship was of very great importance, and that they ought to pay more attention to it in this country. There was another point as regards education which hardly applied to America, because Professor Hamlin had told them distinctly that apprenticeship had never really taken root in America, and therefore the shoe did not pinch them; but it was beginning to pinch them in England rather badly,—again, he thought, owing to a misunderstanding of their efforts at educational reform. Apprenticeship—the training in an architect's office—had begun to go out of fashion altogether. They had hoped, when they were at work on this scheme of education, that they should put their boys and their young men through their facings in a school—that there they should learn at any rate the drudgery of the preliminary technique, and then come fairly trained into an architect's office, when they might be better qualified to learn than if they came perfectly crude from the school or the University. He regretted to say that that idea had not been followed out loyally, but had been a good deal wrested from its original intention; and apprenticeship, so far as he could observe, and so far

as other more experienced men could observe, seemed to be going out of fashion in this country. And he thought it was a great mistake that it should go out of fashion. He attached great importance to preliminary training at schools, but he would rather sacrifice that than give up apprenticeship altogether. They must recall what happened (he made this thrust at the professors) after Blondel started his magnificent course. They had first Louis Seize, then Empire, then French Gothic, then Viollet-le-Duc, and then the classic of Napoleon the Third. They had got to about the bottom when they reached that phase of Gothic on the one hand and Classic on the other, and he trusted it would not be a precedent for what would happen in our own country. He did not believe it would. He believed we had much more individuality in this country, and he believed that apprenticeship in an architect's office would develop that individuality. He did not believe we should ever build up the magnificent tradition that the French had established, and, very desirable though that was, it was wiser to have regard to the traditions of our own country and our own race.

Mr. JOHN W. SIMPSON [*F.*] said it was his particular privilege and very great personal pleasure to propose a vote of thanks to Professor Hamlin for his more than excellent address. It was one of the most interesting, most thoroughly worked out, and most charmingly presented Papers he had ever had the good fortune to listen to in that room. He should like to go through a great many points which the Professor had mentioned, but at that late hour he was afraid even to open upon it. The Paper was as full of meat as an egg. But there was one point he would venture to try and answer—viz. the question whether the creation of any school of architecture tended to help or to hinder the rational and free development of the art. That question must be answered, because if they left it in doubt, and still more if they allowed it to be answered in the negative, it would cut from under their feet the whole inducement which inspired their efforts for education. A school of some sort or another was a necessity for the growth of architecture. All their art was founded on tradition, and from that tradition they could not get away. The difference between a nation without a school and a nation with a school was that one had learnt its tradition easily by direct means through the teaching of men of greater experience, and the other had had to find it out for itself and had learnt its tradition imperfectly. But tradition there must be, and the simplest way of carrying on tradition was by means of a school. Then the Professor gave the date—1866 he thought it was—and remarked how short a history theirs was of education in America. The Professor's remark reminded him of the charming Yvette Guilbert, who was cross-questioned the other day by a reporter when she was leaving New York. She made some strictures upon certain points of New York life of which she did not approve, and the reporter said, "Remember, madam, we are but a young nation," to which that delightful person replied, "The youthfulness of the American nation is one of its oldest traditions!" When the Professor spoke of 1866 as such a recent date, he asked himself what was the date of our own education here; how far back did we go for any systematic attempt at teaching architecture? We in the Institute at any rate were only in the middle of our efforts to greatly improve, reorganise, and coordinate the education of our architects throughout the country. He had said education—he would prefer to substitute the word "training," because he thought with Mr. Jackson that they should not confuse education with the technical training of the architect. But we had set up under our new Charter a Central Board, and he hoped on that Board we should find the greatest and best men in the country who would take over the whole question and direct it and guide it so far as they could.

Professor C. H. REILLY, M.A.Cantab. [*F.*], in seconding the vote of thanks, said he was a whole-hearted admirer of the great American schools, even to the extent of paying them the flattery of imitation at Liverpool, where architectural courses were designed very much on the lines that Professor Hamlin had described. Liverpool University had its B.Arch. degree, and its diploma for professional students, but in the courses for both of these—and here it differed from the American practice—it included a period of not less than two years of office work. He was particularly glad to have this opportunity of thanking Professor Hamlin, because he had recently had the pleasure of visiting his school at the Columbia University, and the other great schools of America, and he had come back more impressed than ever with the magnitude of the work they were doing. The American journals and reproductions of American work here testified to the great improvement that had taken place in the last decade, an improvement it seemed to him chiefly in two directions—viz. in the great monumental character that pervaded their architecture, and in the refinement of detail it possessed. Although America had always had signally distinguished architects, great personalities leading the profession, those architects, so far as he could gather in his short visit, were engaged in such vast practices, with such large office staffs at their command, that it was impossible for them to give that individual attention that they in England were accustomed to give to their work, and the consequence was that this re-refinement, this general feeling of scholarship which was so apparent in the modern buildings of America, was due and must be due in a large measure to the assistants; and he thought that this training of the assistants was, in its turn, due to the growth during the last ten or twelve years of these large schools of architecture

with their very complete and elaborate equipment. Turning to the schools themselves, the first difference to be noticed was in the length and the thoroughness of the training provided. Four years appeared to be a minimum length of course. As an example of the eagerness of the students he might mention that at Cornell, on returning there at 10 o'clock at night, he found the students at work in the draughting-rooms—some thirty or more of them—making a jovial scene of song, but with a great deal of work being done; and he was told that the same students returned to lecture at 7 o'clock the next morning. After that he was glad to be told that the Architectural College beat all the others at games. It was obvious then that there was a great deal of vigour in their pursuits. Further, although their studies continued four or five years, all this time they were carrying out a series of designs of increasing magnitude. There was one on the wall which he managed to bring away from Pennsylvania University; it was a design set by the Beaux-Arts Society, and was being worked at in the various schools he went to. He saw two or three hundred such designs for a Naval Pantheon. This one showed the way the imagination was trained and the style of draughtsmanship that was expected. It was fourth year's work, and one month was allowed for it. He thought there were few of them in England who would like to turn out such a design as that shown in one month's work. That particular set was done by an Englishman trained at the Pennsylvania School. But it was not, he thought, the length of the term or the enthusiasm of the students that had caused this great revival—as Professor Hamlin called it—of American architecture. It was because they had apparently in all their schools a perfectly definite faith. So far as he could make out, they devoted themselves to teaching monumental architecture based on great classic traditions, and did not worry in their designs with any of the immature styles—Tudor, Elizabethan, Jacobean—but went straight to the fountain-head. Their reading and study followed the whole course of history, but their design was of this definite type; hence, they reached a facility and quickness of design which the majority of our students lacked, and they could tackle great problems with a power which it took many years in England, and big competitions for actual buildings, to give to the English architect. That was the great outstanding feature of American training—they put before their students the opportunity of doing monumental architecture. That, he thought, was a much finer ideal than giving them the actual problems they might have to carry out in the first six months of their architectural career. It was more important, he thought, to awaken the imagination of the student than to equip him with all the knowledge necessary for the execution of a week-end cottage or a small farmhouse. It was due to this fine training in design that great monumental architecture was being built up in America, architecture which, he thought, they would soon come to realise as the great American style which had been mentioned this evening.

Mr. H. HEATHCOTE STATHAM [*F.*] said he should like to say a few words on one or two points that he felt strongly upon during the reading of the Paper. The first was a reference to that old colonial style of timber building, and the Professor's reference afterwards to the hope that the influence of material would be more felt presently. That was a beautiful instance of the influence of the material. If they looked at the old colonial work, they would see the classic style transformed by the influence of timber—the colonnades with the influence of the classic style about them, but the proportions totally changed in consequence of the working in a different material. The second point he wished to mention was that he had felt for a long time that there was far too much in American architecture of the Ecole des Beaux-Arts, and he was very glad to hear that Professor Hamlin thought there was going to be a reaction against it. He had been in the habit for many years of going over to the Paris Salon every year, where he saw a number of very fine monumental designs, which were all very good; but it always seemed to him that he saw the same every year—they got a school, but they got no individuality. With regard to what Mr. Jackson said about the advantage of going to specialists, he (Mr. Statham) was one of those with no mathematics, and he regretted the want of them every day; but though the details of electricity and drainage became too complicated for one man to know them all, and, as Mr. Jackson said, one had to go to a specialist, he thought one should know enough about the principles of them all to know whether the principle one had got was the right one or not. There was a case a little while ago of an architect who knew nothing of a certain special construction going to a specialist, and that man made a blunder and the building came down. That architect, he thought, ought to have known whether the principle given him by the specialist was right or wrong. His strong feeling was that they should know all the principles, if they did not know the details.

Professor F. M. SIMPSON [*F.*] said he should not like Professor Hamlin to leave the room believing that they all agreed with what Mr. Jackson and Mr. Blomfield had said about general culture and general education. That was the one portion of the curriculum at Columbia University which to his mind was of the greatest value; it was in that one particular essential that it differed from the other Universities in America; and he thought Columbia had shown its good sense and its wisdom in taking the lead and in insisting that all students who were going to take its degree should in the first place go through a two-year course of general education; and, moreover, in requiring students to

pass the entrance examination before commencing the certificate course. He must confess that he was unable quite to follow Mr. Blomfield when he said he would prefer to have a man in his office who was not partially trained. Surely he did not mean that it was absolutely necessary to take one's degree, to go through a full three years? A man who had gone through this two years' preliminary course in one sense perhaps was partially trained, but he was certainly very much better trained than a man who had not gone through that preliminary course at all. America was a country where, possibly more than in any other country of the world except Germany, education was thoroughly understood, and in America they had worked out, and, in his opinion, worked out in a most admirable manner, their scheme of education; and in hearing Professor Hamlin's Paper he was quite willing to confess that he followed and agreed with every single point he brought forward in the curriculum as being absolutely necessary for an architectural student. He hoped that before long they in England would see students taking not a two years' but a four years' technical training before they went into offices. He did not in any way say that a training in offices was not a necessity, because of course it was; but he considered the two years' course of preliminary architectural training at present recommended altogether too short. He had very much pleasure in supporting the vote of thanks to Professor Hamlin.

PROFESSOR HAMLIN: At this late hour I should be bold indeed if I were to undertake to answer all the points that have been raised. The discussion has interested me profoundly, because the very points that have been brought up and emphasised by one and another speaker have been discussed in the United States ever since 1883. On this great question of general culture and professional education and the relations that they bear to each other, the only thing I would like to say with regard to the interesting remarks made by Mr. Jackson (whom it has been a great privilege to listen to, whose name I have known for so many years and whom now it is a great pleasure to see personally) is this: I do not think that at Columbia the problems of general culture and professional education have been confused or muddled, because the two years of liberal education are required as a pre-requisite before beginning the professional education. Thus their functions are kept distinct. A liberal education is recognised as the training of the mind to qualify the student to undertake to tackle and handle the problems which will come in his professional education; and as a matter of experience we have found, both in the school and in the offices of architects, that the best men, the broadest men, the men who grow, the men who develop, the men who become something not perhaps in the first six months but in the first six years, are the men who have had these two years or, as probably the majority of them have had, four years of liberal training in college before they entered upon the architectural profession. In the second place may I just say this: that these two years of preliminary training before beginning the architectural profession, as I have distinctly said, are not required of every man who receives a University recognition, but only of those who receive that time-honoured degree of Bachelor of Arts or Bachelor of Architecture. Columbia University makes a distinct requirement that all those who receive the B.A. or the Bachelor of Architecture shall have had at least two years liberal education preceding their professional education, if they have had the latter; and they require that only of those who are aspiring to the University degree of Bachelor of Arts or Bachelor of Architecture; and in order that they may recognise the students who, without that preliminary broader disciplinary training of two or more years of collegiate study to acquire the Baccalaureate degree, desire to take up a professional course, they have established a certificate of architecture; and that —if I may make one slight correction or disclaimer of Mr. Jackson's remarks—that has a University recognition. The certificated men to whom he has awarded, and justly awarded, such admiration and such praise, who are among our very creditable and honoured students, receive a distinct University recognition, and they are reckoned as students of the University, but they cannot carry the Baccalaureate degree. That is a distinction which is new in American Universities, and, of course, the extent to which the distinction is recognised will depend upon the reputation and importance of the two classes of men in future, because the distinction is one of comparatively recent years. The liberal education, then, that is required of these students who take a Baccalaureate course in Architecture is intended as discipline to prepare them for the application of their minds to the wide course of subjects embraced in the architectural curriculum. And that has been largely a practical need forced upon us by our encountering among those of our students who have not had such a training, extraordinary difficulty in grasping certain categories of ideas in their studies, in the history of architecture, and in the philosophical ideas which underlie all their studies in design, composition, colour, decoration, and other things. We have found that those men who have had a broader education have been able to express themselves in their architectural work better than the other men. And so they ought to do. General culture will, of course, never make an artist—and that we recognise—but we believe that the men who have the artistic feeling in them will make better artists and will display a more advanced and cultured taste when their artistic training is based upon that foundation. With regard to mathematics, there is just one thing to be said with reference to our American practice—

that in New York, in which the majority of our students find their careers, mathematics, engineering, and all questions turning on mathematics, have assumed in the last few years an importance which perhaps they attain nowhere else; because with the development of steel-frame construction, with the building of tall edifices, with new problems of ventilation, and with new forms of construction in concrete, a whole vast group of new engineering problems has come up which it depends upon the architect largely to solve, and which many are compelled to solve willy-nilly; and it is to these men who have been through a mathematical course in architecture and engineering, rather than the certificated man, that we look for the ultimate solution of those problems. We have repeatedly insisted on the advantage that they would stand in by taking the diploma, when compared with other men, in dealing with experts they call in in consultation, and with the men they employ in the detailed construction of their buildings. In other words, we have been trying to adopt a counsel of perfection and not a counsel of despair; we have been trying to adopt a counsel which will lead to the highest possible attainment of our men, and not one which would furnish them with what will enable them somehow to scratch through their professional future. The question of architectural precedents has been dwelt upon. That is a subject, and a very live one of course, in America; it is one about which I think there is a good deal of misapprehension among our friends in the Old World, and more particularly among our French friends than among our English friends. But will you please to remember that Shakespeare is ours just as much as he is yours, that Queen Anne is ours just as much as she is yours, and that all the precedents of mediæval history are just as much ours as they are yours. Until the Colonies became independent of Great Britain, all the old traditions of the Old World and of Great Britain were ours; we have inherited the blood, the traditions, the language of an ancient people and an ancient civilisation which it is a privilege to us to visit; and we can no more ignore those in our architectural training and in our architectural design than we can ignore them in the language that we speak from day to day. That is why we study American history—that is why we can no more produce architecture without the traditions of the past than you can produce architecture without the traditions of the Middle Ages, or even the classical age. It is a mistaken cry that comes from France, and sometimes from England, that calls upon American architects to create a new architecture out of hand. A new architecture never has been created and never can be created. All we can ask of our American architects is that they shall not be slaves to precedent, that they will awake to their environment as well as their tradition. I have taken enough of your time; I will leave these other questions with regard to tradition and to apprenticeship, and to quickness of design and handling problems, and the American style of handling material, on all of which you have remarked much. I will spare you from any further disquisition, and will thank you for the most cordial, and friendly, and patient reception which you have given to a brother from over the sea.

MR. R. PHENÉ SPIERS, F.S.A. [*F.*], writes:—Owing to the late hour to which the discussion on Prof. Hamlin's valuable paper on Architectural Education in America extended, I thought it better not to intervene, but there are one or two statements to which I might add further information. Mr. Richard M. Hunt, the first American who entered the Ecole, became a student in 1846, passed into the first class in 1851, and in 1856 established his atelier in New York. I was, I think, the first Englishman to enter the Ecole in 1859. Matt. Wyatt, the son of Mr. Thomas Henry Wyatt, and an architect named "Robinson," whose identity I have never been able to determine, were before me in Paris in 1858, but neither of them entered the Ecole. The next American was Mr. H. H. Richardson of Boston, whose acquaintance I made "*en loge*" during the examination; not being sufficiently well prepared, however, in descriptive geometry, he failed in his first venture, but entered the school in the following year; he was a pupil of André. Professor (then Mr.) William R. Ware, to the best of my recollection, came to London in the latter part of 1866, where he stayed two or three months before going on to Paris. During this time I was constantly in consultation with him respecting the curriculum of the Ecole des Beaux-Arts at Paris, as also that of the chief polytechnic schools at Berlin, Stuttgart, Munich, and Vienna, all of which I had visited and made notes on during my travels through Germany in 1865. When I entered the atelier of M. Questel in 1858, there were five students in it destined to become *Grand Prix*, viz. Boitte, 1859; Joyau, 1860; Brune, 1863; Pascal, 1864; and Noguet, 1865. There was a sixth student of eminence, M. Gustave Raulin, who just missed the Grand Prix on two occasions, but otherwise carried off every other prize in the school. It was to the latter that I advised Mr. Ware to go in order to take lessons both in design and drawing, and although Mr. Ware had already been in practice for some time in Boston, yet anxious to be fully equipped with the principles of design followed in the Ecole, the correct method of projecting shadows at 45° on geometrical drawings, and the testing thereof, he spent about six months in Paris in order to acquire the same. He then returned to Boston and started the Art section in the Massachusetts Institute of Technology, I think, in the latter half of 1867. Since then a very large number of Americans have gone to Paris to complete the education commenced in the Massachusetts College and

in others. Of these many came to me with introductions from Prof. Ware for advice as regards their career in Paris; others again came here after passing through the Ecole or direct from Boston and New York to scheme out tours in England, France, Italy, and Spain; and it has been one of the pleasures and privileges of my life to welcome these American enthusiasts and give them any information in my power. I might add that M. Létang, the first French teacher mentioned by Prof. Hamlin, was a pupil of M. Vaudremer, who since 1874 has been one of our Honorary Corresponding Members. M. Despradelle, the second teacher, was a pupil of my former comrade, M. Louis Pascal.

MR. FRANCIS S. SWALES writes:—

It has been a great pleasure to me to read and to hear the very valuable and interesting Paper by Professor Hamlin, and I wish to thank the Institute for affording me the opportunity of being present upon this occasion; also to offer my congratulations to the Committee which secured this contribution to the literature upon Architectural Education from so eminent an authority upon the subject, so far certainly as it affects the United States. There are one or two points upon which it seems to me that his Paper might be somewhat more explicit, and his point of view somewhat less partisan—or, should I be more accurate in saying, less professorial? In the historical sketch I noted that he omits to mention the earliest period of American architecture proper—when the New York City Hall was built and the designs for the United States Capitol were produced, when certain work of no great pretensions but of excellent character was produced in those parts of the country which, if not at the time actual *States*, were at least American *territory*, and where, as for instance at St. Louis, Detroit, New Orleans, and New York, architects who had been trained in France had emigrated. I am sure that Professor Hamlin agrees with me that several of the best works of the period of which I speak show traces of the influence of the later works of the Louis XV. period in France. I think the French influence never was completely suppressed, notwithstanding the importations of Greek, Gothic, and Victorian from England, which had the effect of turning the practical common sense of the American citizen against all this so-called architecture and the men who produced it. The "battle of the styles" in England left architecture all but dead in America; but, in a wounded and diseased state, it still existed in some of the important works which, for politic reasons, we must join in condemning to-day, but which will be duly credited in the histories still to be written. Hunt's personal influence was very great, and that of his works hardly less so. I can quite appreciate the enthusiasm which Professor Hamlin expresses for his great friend and former senior professor at Columbia—William R. Ware, who doubtless did an excellent thing in securing for the first American College of Architecture as professor of design a French-trained architect—the late Eugène Létang. But I am not in accord with the rapid conclusion Professor Hamlin comes to, that Hunt pressed the button and Ware did the rest by organising the M.I.T. and Columbia courses in architecture; and that all the other courses are practically copies of these two. Hunt's little atelier was more important for what it attempted rather than for what it accomplished. Among his pupils, besides Messrs. Post and Ware, were Furness and Gambrill. Gambrill was afterwards the partner of H. H. Richardson during his stay in New York, before the latter went to Roxbury. Richardson, like Hunt, had studied in the artistic atmosphere of Paris, and returned to America at about the same time that the M.I.T. was founded, and his mighty influence swept the country like a storm before the M.I.T. rose to notice. In the office of Gambrill & Richardson Mr. Mead worked as a draughtsman before going to Paris to study; McKim also worked there, I think, after he returned from the Atelier Daumet; and later on Stanford White also received part of his training in the same office. From the offices of either H. H. Richardson or McKim Mead and White have come practically all of the leading men of to-day. Except for the influence of Létang at Boston the instruction given in design in the American colleges prior to the time of the Chicago Exposition should not be taken too seriously. It was for the most part neither great nor good, and I know that among many graduates from the M.I.T. itself there existed the feeling that much time was wasted because the stronger men were held back to the speed of the dullest in the class, or else the dullest remained half-instructed. "Don't waste your time in an American College, but go to Paris," was what I was told by all except the college professors. During the 'eighties Architectural Clubs were formed in various cities throughout the United States; there were the Architectural League and the Sketch Club of New York, the Boston Architectural Club, the T-Square Club of Philadelphia, the Chicago Architectural Sketch Club, the St. Louis Architectural Club, Detroit Architectural Club, and others at Cincinnati, Rochester, Buffalo, Pittsburg, Minneapolis, and San Francisco. Monthly competitions in design were instituted among the members, and here the men from Paris and the M.I.T. met those who had only office instruction—not always to the infinite satisfaction of the former. Gradually the younger men sought the advice and criticism of the elder ones, and the pupil system of the Renaissance in Italy was again in existence between the years 1890 and 1894. The prizes in the Club competitions were won regularly by the pupils of certain men, but the name of the teacher did not appear. In 1894, as Professor Hamlin has remarked, the Society of Beaux-Arts Architects

was formed and a competition was held on the lines of those of the Paris school. The competition was held among pupils of recognised schools and ateliers, which latter at the time were not generally known to exist. A separate competition was held among the members of the Architectural Clubs under the same programme. In one competition first place was awarded to a fifth-year student in the M.I.T., and second to a pupil in the Atelier Masqueray. In the Inter-Club competition first place was won by the same pupil of Masqueray, who was also a member of the Sketch Club of New York. Keen interest was taken by the architects throughout the country in this and succeeding competitions. The clubmen or draughtsmen formed ateliers, and obtained the best instruction and criticism that could be obtained locally. Several of the ambitious young men went from western towns to seek positions in New York with the primary object of obtaining instruction in the ateliers of Masqueray, Freedlander, Flagg, Carrère, Hastings, and others. In two of these ateliers, Masqueray's and Freedlander's, preliminary examinations had to be given to prevent overcrowding. These examinations were, I think, the first application to an American school of what might be called the French sieve in America, by which I mean that it was an examination similar to, though not so severe as, the Admission Examination to the Ecole des Beaux-Arts. It was perhaps more like that which has since been adopted at Columbia University, which Professor Hamlin describes as "the only school which requires the preliminary test"—to which I add the question "still existing?" The Architectural Clubs, however, recognised its value at a somewhat earlier date by requiring what was called an "Initiation Sketch." Too much emphasis cannot be put upon the importance of such an examination, which in substance says to the aspirant, either "You possess enough ability to make it worth your while to study the art of architecture," or "You are trying to enter a field where you cannot succeed." The change from the regular "four years' course" to one of indeterminate duration is an adoption of the method of the Ecole; also the system of graduation upon achieving a number of "points." Professor Hamlin does not say whether an age limit is placed upon graduates from Columbia; but one of the advantages of the Paris training is that, as far as the competitions for school honours and attempts to *décrocher le diplôme* are concerned, they must cease at the age of thirty. Can any good result from the substitution of the glamour of "Ph.D. Columbia" at the age, say, of forty, for the "A.D.G. Paris" at thirty? On the contrary, is there not reason to believe that, without an age limit, we are likely to find many a first-class carpenter spoiled in the making of a second-rate architect possessed of all the culture that Ph.D. is supposed to signify? I cannot but regret that, by inference, comparisons have been drawn between the French and American systems of training, and that the University is held up as the "only gateway to artistic and professional salvation"; that the Paris juries are accused of lack of breadth and a tendency to discourage "originality of conception"—inferences which, if drawn, are quite without foundation. Paris teaches *principles* only—the same principles that are taught the world over—but these are taught more systematically than elsewhere. For the instruction of the student it will be many years—ten, twenty, perhaps fifty, perhaps more—before any American school can possibly equal the Ecole, because it is not yet possible for an instructor to say: "You may see this principle worked out in such and such a building, and also in such another building; after seeing both, make up your mind as to which is the better." There is not yet in any American city a sufficient number of objective examples of great design within a small radius from the atelier where the study is carried on. There is not a sufficient number of ateliers or professors to make competition very keen. There is a dearth of experienced old architects, who have been keen students all their lives, possessed of a little sheltering niche (provided by a wise Government), and thus enabled to devote a large part of their time to the helpful criticism of the work of younger artists. We have no Pascals, no Moyaux, no Daumets, no Vaudremers; nor have we more than a half-dozen architects of equal ability who could or would give up their time as do Redon, Laloux, Girault, Esquié, Bernier, André, Paulin, Deglane, and the host of other men of the same calibre at Paris. If some day we get a Secretary of Education and the Fine Arts—such a secretary as, say, Daniel Burnham might be!—we might hope to see, when they reached old age, such men as Carrère, Gilbert, Hornbostel, Hastings, Howard, Despradelle, Masqueray, Warren, Sullivan, and Eyre giving the most valuable instruction possible to young Americans. At the present rate of progress we may reasonably hope to have, if not as many as at Paris, enough of great works in New York to enable Columbia to take an equal rank with the Ecole des Beaux-Arts as an architectural nursery. The tide to Paris will need no stemming when an American school can afford equal advantages. The time will come; but it is not yet.

TOWN PLANNING.

PAPERS COLLECTED BY THE R.I.B.A. TOWN PLANNING COMMITTEE.

VIII. PRINCIPLES TO BE OBSERVED IN LAYING OUT TOWNS AND SUBURBS.

By EDWIN T. HALL [*F.*]

In compliance with the request of the Secretaries of the Town Planning Committee that I should give my opinion on principles to be observed in the planning of towns and suburbs, I would first point out that regard should be had—

1. To the nature of the geological formation of the site and district. For example, if there be any minerals, such as coal, iron ore, or copper, in the district, then the future of the town and its configuration will be likely sooner or later to develop in relation to the exploiting of the minerals.

2. To the proximity of ports or navigable rivers, where docks, wharves and warehouses, shipyards, workshops, &c., will have to be provided for at some time or other.

These two factors will render necessary extensive provision for housing artisans, labourers, and factory hands, as well as for all the accessories of the resulting extensive trading. Relative concentration of these will be the essential principle of the lay-out. Provision must then be made for adequate open spaces in the suburbs.

3. If, however, the town be a centre for agricultural business—a market for a wide district—then its lay-out will be entirely different, and the provision for public parks or gardens will be restrained.

4. A seaside town or residential centre will require another treatment, where parks will be less required than playing-fields or gardens.

5. Common to all, however, will be highways to other towns, and the principal thoroughfares forming the main routes through a town should be as direct as possible and as straight as contours permit, it being a fundamental principle that the shortest route for traffic is the best. Such roads should be wide, and sixty feet is about the maximum that is necessary and convenient for administrative handling.

6. Where main routes cross, or many roads converge, *and only in such cases*, a circus should be created to denote that it is the intersection of main or many routes. Other cross roads should not be so treated.

These roads, from the architectural point of view, should, as a rule, be only straight where they command some prospect of natural interest or of some public place, monument, or building, and if of any length they should be broken up with open spaces such as "squares" or gardens of symmetrical plan. Otherwise streets should be curved for the display of their architecture.

A town plan containing such streets concentric with and having radial branches to the circus would be interesting.

7. In dealing with London we have a unique problem, a province of buildings containing characteristics of many aggregated towns.

To talk of relaying out London is impracticable, yet the principle of direct main routes should be observed in any replanning, and the aim should be with all roads to open up prospects such as above suggested.

8. The development of suburbs is another matter. Parks or commons should be conserved or created as lungs for every district and for the public enjoyment; but parks can only be rare and far apart. What, however, can and should be provided at frequent intervals on any large area is playing-fields for the residents. It will keep the young in good physical condition and foster neighbourliness and local patriotism. The practicability of this is shown on the Dulwich College estates, where as Chairman of the governors I have taken an active part in giving effect to this last-named phase of development. These estates extend north to south from Herne Hill Station to the Crystal Palace, and east and west from near Camberwell Green to Tulse Hill, an area equal to about one-sixth of inner London. In addition to a previous gift to the public of Dulwich Park (an area of about 70 acres), the governors only a few years ago set apart about 160 acres of land in plots all over the estate of about 8 to 20 acres for playing fields, or to conserve woods. These cases are let to various clubs, and all are regularly filled with players.

The justification for such allocation in all cases is (1) the prevention of overcrowding and the provision of fresh air; (2) the retention of natural beauty; (3) the provision for open-air games; (4) the conservation of other amenities which tend, and will still further tend, to draw residents to the neighbourhood, and (in our special case) also to retain as tenants those whose interest lies in the great educational institutions with which Dulwich is identified; and this justification is applicable to other similar scholastic districts.

9. In the lay-out of residential suburbs the main routes should be, as before suggested, broad, direct, and straight, *and on these, and these alone, should tramways and omnibus routes be permitted.*

Subsidiary roads should be laid out with regard to contours, to the preservation of woods and forest trees, ponds and other natural features, and all tramcar or omnibus traffic should be discouraged or prohibited.

The public seek quiet for their homes and freedom from the noise and dust of the cities or towns in which they work. These are needs almost as pressing and as of much importance as fresh air, and should be jealously guarded.

10. Both in towns and suburbs, churches, schools, municipal buildings, theatres, railway stations, concert and other halls should be on isolated sites as far as practicable for hygienic reasons, for safety from fire, and for architectural effect. The buildings

then become centres of pride and interest—both mentally healthy qualities, tending to encourage art and patriotism not only local but national.

REVIEWS.

ENGLISH LEADWORK.

English Leadwork: its Art and History. By Lawrence Weaver, F.S.A. 4o. *Lond.* 1909. *Price* 25*s.* [*B. T. Batsford*, 94 *High Holborn.*]

"But thou, thou meagre lead,
Which rather threatenest than dost promise aught,
Thy paleness moves me more than eloquence;
And here choose I."

With this apposite quotation from the famous Casket Scene the author of this valuable and beautiful monograph sets out gaily to discourse on his subject in over two hundred pages, which have everything about lead except its common reproach of dulness.

It has always seemed to the writer that the rivals whose election falls foul on gold and silver make out excellent cases for themselves, and that there is an air of casuistry in the usual commentator's justification of the assessor's award in this metallic competition.

However that may be, we too have chosen pale lead, having no more to do with gold and silver than to deal out one part of the former and five of the latter in lawful current coin to the specified publisher whereby to gain the secret writ and illuminated within these lead-coloured boards.

It is a common piece of affectation to ignore the value of the literature of architecture and assert that only plates are requisite. We are much mistaken, however, if the present work can be so cavalierly treated. The author has a pleasant way of pertinent quotation, often from ancient and half-forgotten sources, that so enlivens a really serious and scientific exhaustion of the subject that one can imagine many readers who will fail to realise the toilsome and expensive labours and researches he has so successfully embodied in this book.

His fancy delights in such feats as that of arousing Mr. Samuel Pepys, M.A., F.R.S., from his leaden shroud to accompany him on a jaunt by way of an L.C.C. steamboat down the river to appreciate the loss that ten-storied warehouses have inflicted on London's sky-line since his day. One can imagine the old rascal giving reluctant attention to his guide, while his eyes concern themselves with the passengers, more interested if he could chance on a rival to those beauties which it was the affair of his acquaintance Sir Peter Lely to immortalise.



THE GREAT VASE AT MELBOURNE, DERBYSHIRE.
(Cast in lead by John van Nost in 1706.)

The consequence is that, turning over the book to look at the pictures, the reader finds himself speculating what the author has to say on this or that example. See, for instance, how, on page 178, he makes a foolish statue ashamed of herself.

The book is divided into sections dealing with fonts, rainwater pipe-heads, cisterns, spires, steeples, and domes. It then touches the sculptural and garden use of lead in sections dealing with statues and vases. This part is very fully illustrated, and contains a very interesting account of the old lead workers' yards, whence so many of the existing garden figures were obtained. Finally there is a chapter on sepulchral leadwork and various minor and interesting uses of the metal, leading up to one on modern work,

which shows how much progress has been achieved in the present-day revival of the art.

The author looks to Professor Lethaby's little work on leadwork (1893) as having reawakened the subject, and gives full acknowledgment also to Mr. Frank Troup's labours in the actual teaching of leadwork craftsmanship.

One can well remember the first appearance of "Lethaby's Leadwork," as it came to be called. It was a brilliant reconnaissance in force of the field, and bears the relation to the work before us that the early invasions of Cæsar in Britain bore to the full Roman occupation. There is now a regular Roman wall in the form of a minute bibliography of some seven pages of all that has been written on lead by which to consolidate the conquest and warn off the unprepared outsider.

Looking through this list one is surprised to see how little has been recorded and written on the architectural use of leadwork. Lead suffers from the great drawback of its ready conversion into cash or bullets. It is not easy to keep the pipes and flashings complete in an unoccupied house, and there is point in the old gibe that "you never see a plumber run without he has a piece of lead under his coat." So that it is easy to imagine how much has disappeared into the ever-handy melting-pot.

Our author, however, is not carried away by his subject. By parallel passages from Evelyn and Pepys he dismisses Mr. Starkie Gardner's too ingenious suggestion that Nonsuch can be claimed as leaden architecture. One is grateful for this idea if it encouraged Mr. Gardner to work out that interesting leaden bridge at Charing Cross (fig. 405) which is so well known.

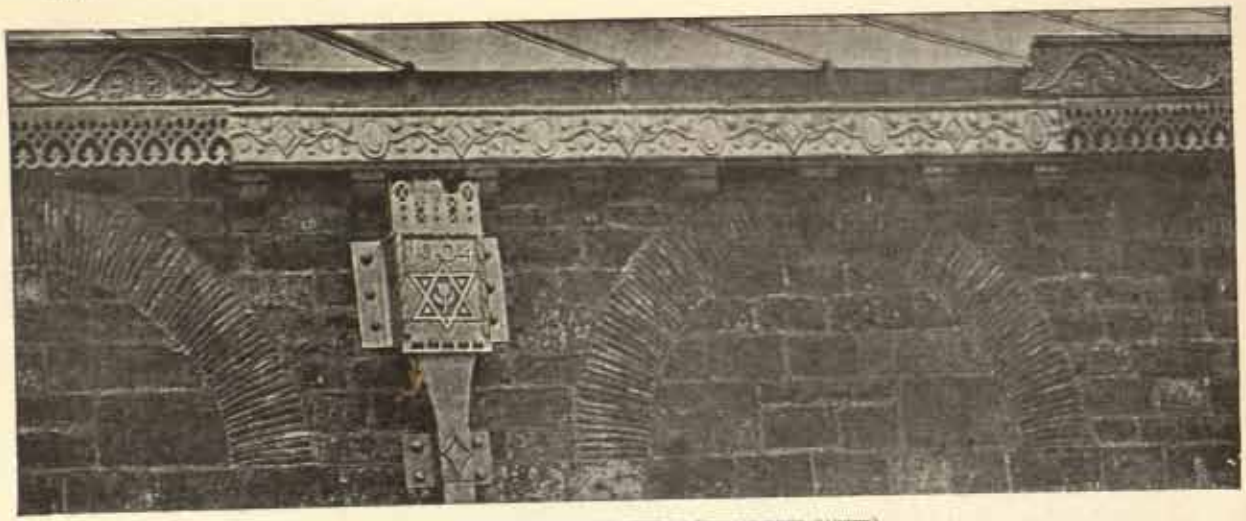
Mr. Weaver gives a reproduction of Sir Charles Nicholson's brilliant sketch, fig. 406, of a design for a leaded church which has already appeared in this JOURNAL.

There is an undoubted field for design in lead in many situations where its special qualities would have so much value. On the all-important question of the plumber to carry out this work the author has in his introduction, page xiv, the following passage:—

"Despite, however, much precept from those who seek to raise the level of the crafts, very small is the number of people who make pipe-heads of merit, and this complaint is true of all leadwork which has artistic possibilities. The fault lies rather with the average plumber than with the average architect. There is a clear enough call for good design and for a return to sound and traditional methods, but nearly all the 'ornamental' leadwork done at technical schools is unspeakably bad. In more than one of the books on plumbing which have won a deservedly high place, hints on 'ornamental' work are given by instructors who are past-masters in technical mysteries. Most of the examples used to mould the decorative sense of the student are wholly bad. Until the authorities of technical schools realise that the craft of leadwork must be taught by one who is an artist as well as a technical expert, these grievous productions will be thought by the rising generation of plumbers to be 'artistic.' There are, of course, honourable exceptions. Pro-



LEAD FIGURE OF WILLIAM III. AT HOGHTON TOWER, LANCASHIRE.



WATER LEADWORK, CHARWELTON CHURCH (CHRISTOPHER CARTER).

fessor Lethaby, Mr. F. W. Troup, and others have struggled manfully to fill London County Council students with a wise spirit, and individual architects have sought to instil into the mature plumber some right feeling for his material. In practice, however, if good leadwork is wanted, the few firms who specialise are almost the only sources of supply. The Worshipful Company of Plumbers has done as much as, if not more than, any City Company to support and improve the craft it represents. If the Company would devote to some instruction in artistic righteousness a tithe of the energy which it gives to improving technical conditions a good and greatly needed work would be done."

Similarly to the immediate point is the protest against tampering with the leaden casing of our old spires and steeples, page 138:—"During the latter part of 1907 the lantern needed re-leading, and the opportunity was taken to remove the twelve flaming vases which, as the illustration shows, formed so notable a feature. They were of wood covered with lead; the wood had rotted; restoration was certainly needful. The failure to replace them is, however, serious. They were a characteristic feature of Wren's design, and the plea of lack of money for work sounds absurd in Lombard Street."

And again, on page 139, relating to St. Nicholas Cole Abbey:—"The loss of interest caused by the re-leading of the steeple is very marked. It is certainly a point to be insisted upon that, in any restoration, repairs only should be permitted so that the original plumbing method is scrupulously followed. The lead should always be re-cast in the sand, as is the practice at Westminster Abbey, and no modern milled lead and wooden rolls, etc., should be used."

The appreciation that the author brings to the work of Sir Christopher Wren is shown by the following passage, page 115:—"He created within the square mile of the City more forms of steeples than all the architects of the Middle Ages, and if, as was inevitable, some pay the penalty of rash experiment, others make an assured success. The attempt to set out the line on which Wren proceeded is hampered at every turn by lack of evidence. We have little clue as to some of his more curious designs, but these were probably less arbitrary in their creation than may appear to us in the absence of such indications.

"That Wren was a close student of his predecessors in the art of building is easily proved, but his debt to mediæval sources is not generally realised. Imperfections of detail ought not to obscure an appreciation of the fact that his grasp of Gothic principles is rarely at fault. There is much in Wren's work otherwise inexplicable which may be traced to the wide catholicity of his mind. It is not only difficult but impossible to point to another architect of his epoch who, with anything approaching his success, seems so nearly to have reconciled the opposing ideals of classicism and romanticism. To the union which he thus achieved must be ascribed the marvellous picturesqueness which, united with imposing mass, makes St. Paul's the unique masterpiece amongst Renaissance churches."

So far as the writer knows, the technical details of the spire construction and leading of Wren's steeples, see pages 138–140, are new and of a distinct value, and are the evident outcome of toilsome personal journeys up the pigeon-haunted towers of the City churches.

True principles are not much in favour nowadays, and as regards the application and use of lead, a survey of the work illustrated seems to inculcate a wise catholicity.

Lead is certainly something more than cheap bronze. At the same time, it is a mere puritanism



LEAD STEEPLE, ST. AUGUSTINE'S, WATLING STREET.

that would tie the art to a narrow range of tinning, bossing and perforating effects, and rule out most of those lusty larks which the cheapness and facility of the metal seem to have encouraged. The superiority of lead in our damp climate over sugary marble or mossy stone for garden work admits of no dispute. Happy should we be if clients could see that first cost is here truly last cost and release us from the cast-iron gutter and pipe oppression. There is a considerable reckoning to be faced shortly, thanks to the increasing competition which every day makes these pipes and gutters more paper-like in substance.

The present-day plumber is so hypnotised by his registration, examination, and by-law diet that he has lost all interest in the finer aspects of his craft. You may find a man whose pride is in the perfection of his wiped joints aghast at the idea of working out a rainwater head or panel in piercings and ornaments of his own casting. Education so cramped must be radically at fault, and we hope that a wide circulation of this comprehensive book amongst clients, architects and craftsmen will stimulate a real revival of the art of leadwork.

ARTHUR T. BOLTON [*F.*].

MODERN SANITARY ARRANGEMENTS.

The Drainage of Town and Country Houses: a Practical Account of Modern Sanitary Arrangements and Fittings. By G. A. T. Middleton [A.], author of "Building Materials," "Modern Buildings," "Stresses and Thrusts," &c. New and enlarged Edition. Illustrated by 8 Plates and 105 Diagrams. 8o. Lond. 1908. *Price 4s. 6d. [B. T. Batsford, 94 High Holborn W.C.]*

Some few months ago a second and enlarged edition of the above work was published. The author includes a large subject in a small compass, but the letterpress is most concise, and as the illustrations, although necessarily small, are very clear, the volume forms a valuable addition to the text-books on hygiene. Although the title suggests that the book treats of the sanitation of houses only, the author includes drainage schemes for other buildings—viz., a restaurant, school, town shop, &c. These illustrations are useful, as Mr. Middleton, in the early portion of his book, deals to some extent with the principles of drainage, and shows later how these principles, simple as they are, can be applied to all classes of buildings. There is no subject allied to our profession (excepting perhaps perspective) on which so many volumes have been written calculated to bewilder rather than to enlighten the student. The perusal of such books too frequently confirms the reader's opinion that the subject is one to be left in the hands of the sanitary engineer entirely. He learns that in certain positions traps are necessary, and that disconnecting chambers are advisable—in fact, required by the by-laws. Mr. Middleton deals with sanitation as practised to-day, and on lines generally accepted as those best adapted to modern require-

ments. It is only when such principles have been learnt that one is able to form an opinion on "trapless drainage" or the "ill effects of disconnecting chambers." Such subjects have recently been keenly discussed by professional men whose arguments cannot be lightly disregarded, however much one may disagree with them. As regards sanitary fittings, Mr. Middleton has wisely confined himself to illustrating a few only of the best types of each kind. The drainage scheme for a country house (Plate A) is a good one, but it necessitates somewhat long and costly lines of drainage for the rainwater. The whole of this is conveyed into two intercepting chambers adjoining the disconnecting chamber. This arrangement is not advantageous unless it is designed to keep the one trap only on each line of drainage charged by the waste of a fitting frequently in use, such as a lavatory. From the illustrations it appears that in times of drought the traps would become ineffective and the soil drains be ventilated through the open grids. The system shown would be more applicable if the rainwater had to be collected for use instead of, as in this particular case, being run to waste in the sewer. In a future edition it might be advisable for the author to give two additional plans of drainage schemes for the same residence, one showing the rainwater pipes trapped at the feet and discharging into the general system, and another showing the fresh water kept distinct and discharging into a storage tank for use. About fifteen pages are devoted to the important question of sewage disposal from isolated buildings where a public sewer is not available. The author broadly outlines the main points of bacteriological treatment. This portion is necessarily very condensed, but gives a good general description of the methods employed for obtaining an almost pure effluent from crude sewage. A reprint of the by-laws relating to house drainage as issued by the Local Government Board is included, but, as the author points out, these are only suggestive, and any District Council can make by-laws which become operative after the approval of the Local Government Board. This leads to a lack of uniformity, and one frequently finds that the by-laws of two adjoining districts are quite different and dissimilar in their requirements.

The work concludes with a chapter giving the usual heads of a typical sanitary report and a brief description of special points to be noted whilst engaged in this work. A good index completes the volume.

R. Stephen Ayling [*F.*].

Mr. Geo. P. Bankart is issuing a beautifully printed little booklet giving photo-illustrations of executed examples of cast and wrought leadwork. The work includes some very pleasing designs for rainwater heads, piping, and gutters; parapet sheeting; garden vases, figures, cisterns and fountains; window-boxes; tablets, sundials, &c.

ABERDEEN STUDENTS' SKETCH-BOOK.

The Aberdeen Architectural Association was founded in 1905, its objects being "the advancement of architecture, the encouragement of the study of subjects connected with architecture or any of the allied arts or crafts, and to serve as a medium of friendly intercourse among its members." The latter include architects, painters, and sculptors, assistants and apprentices of architects, art teachers, and workers in one or other of the arts allied with architecture. To encourage the study of existing examples of ancient art and craftsmanship studentships are annually awarded by the Aberdeen Society of Architects for carefully measured drawings from good examples of old buildings. These studentships, besides being of the highest value in the training of the architectural student, have resulted also in the production of valuable records of ancient buildings, many of which, under the influence of age and exposure, the changes arising from altered conditions of life, and in some cases from indifference and neglect, are rapidly losing their original character, or disappearing altogether. To provide a means for the preservation of these and other records of architectural value in a permanent form for study and reference, the Aberdeen Architectural Association has started a *Sketch-book*, the first number of which has just been issued under the editorship of Mr. Geo. G. Irvine [*A.*], who has charge of the classes in architecture at the Robert Gordon College, Aberdeen. In a letter which accompanied a copy of the *Sketch-book* presented to the Institute, Mr. Irvine says: "It is hoped that its publication will assist in realising the aims with which the Association was founded, and that it may help towards the completion of that record of buildings of historic and architectural value which is so much to be desired at the present day. Every endeavour has been made to ensure accuracy and thoroughness in the representation of the various subjects illustrated, and to express their value to the architect, antiquary, and local historian." The Association is heartily to be congratulated on its venture. The drawings are good, useful, and thoroughly student-like, and the various subjects well and faithfully rendered. Large folio in size, somewhat resembling the similar publication of the London A.A., the drawings are admirably reproduced and printed, and the work altogether forms a very creditable production. The cover, with its lettering, was specially drawn for the Association by Mr. Arthur Payne, who has done so much to revive the art of good lettering in the district of Aberdeen. The *Sketch-book* consists of fourteen plates—five are devoted to Tolquhon Castle, Aberdeenshire: an interesting and very timely record, for the building is fast crumbling to ruin. Other subjects are the church of St. Ternan, Arbuthnott, Kincardineshire (four plates); Robert Gordon's Hospital; Old House, Hospital Court,

Gallowgate; Old House, Shiprow; the old Grammar School, Aberdeen; Chairs from Trinity Hall, and some Lead Rainwater Heads—the examples given of the latter are all from houses now demolished. The value and interest of the graphic records are considerably enhanced by descriptive notes printed in handsome type on separate sheets—a very commendable feature which might be imitated with advantage by other publications of this kind. The price of the work has been fixed at the lowest sum necessary to cover the cost of production—viz. 5*s.*; post free 5*s.* 6*d.* Mr. Irvine, whose address is 231A Union Street, Aberdeen, will be glad to receive orders for the first number.

CORRESPONDENCE.

THE R.I.B.A. SCALE OF CHARGES.

To the Editor JOURNAL R.I.B.A.,—

SIR,—I notice on perusing the above in the issue of the JOURNAL for the 4th December inst. that an error has crept into my letter dealing with "(2) The measuring and valuing additions and omissions," which should have been rendered 2½ per cent. and 2 per cent. respectively, and not 1½ per cent. and 1¼ as therein stated. Apologising for the oversight,—Yours faithfully,

A FELLOW.

To the Editor JOURNAL R.I.B.A.,—

SIR,—I have nothing to say against the Resolution which has been carried with regard to the interesting Institute publication entitled "The Professional Practice as to the Charges of Architects." But I think many of us would be glad to foresee the utility of mere amendment. Probably there will be reams of statements of difficulties which members have encountered in the use of the old document in response to a circular invitation. When these have been investigated and reported upon at an early date there will be much labour expended, doubtless, in revision of the old statement. But will the revision be convincing? An amended statement may still be open to the objection, reasonable or unreasonable as it might be, that it is drawn up by architects themselves, though, of course, the Institute *imprimatur* should give it weight.

It will scarcely be a statement of prevailing practice in the profession if framed with the view of securing adequate remuneration, nor will it be likely to acquire this distinction unless it is generally adopted by members of the profession.

It would seem, therefore, important that the steps which can be taken to make a scale authoritative in actions at law should be generally known and understood.—Yours faithfully,

HARRY SIRR [*F.*].

THE CHURCH ORGAN.

To the Editor JOURNAL R.I.B.A.,—

SIR,—Mr. Statham quotes the Committee of eminent Musicians, Clergy, and Architects (Report 1891) in support of a west-end position for the organ, with the choir in the nave. His critic, Mr. Cliffe, regards this arrangement as impracticable for parish churches, and favours another contention by Mr. Statham—a central position for the organ on a screen: in place of the Rood, apparently!

Surely the pre-eminent Committee, after considering all possible arrangements, recommended most strongly of all the west-end position for organ *—and choir.* Why take the organ west and leave the choir stranded high and dry in some other part of the church, breaking the musical unity?

There is no authority for a choir, as usually accepted, in the chancel or nave of ordinary parish churches, and the adoption of the eastern position has brought destruction to many a beautiful chancel during the past sixty years. The mammoth organs, blocking up chancel aisles and chantry chapels, or boxed up in confined chambers, ugly excrescences, followed the misplaced voices.

The only thing urged in favour of it all is that the choir "look nice." Some of us prefer the look of the sanctuary without them.

With a west-end arrangement of organ, orchestra, and choir, I have an intimate experience of many years in several churches, and can vouch for the result tending to strong congregational singing, a devout choir, and a reverent ritual in the sanctuary.

So far, I have found that a low west gallery for choir, orchestra, organ console, and (if need be) conductor, with the main part of the organ spread out on the west wall above, and the choir vestries under the gallery, is good. The bellows &c. of the organ have to be properly housed and carefully worked out, in conjunction with an open-minded organ builder, by an architect with a respect for music, if not musically gifted.

A capable man as master of the music is essential—with more than mere musical knowledge. In some places this is a difficulty, but the lack of him is rather worse in the chancel.

So far, my experience has been fortunate, and my privileges great, whether with the leaders of the music or in the congregation: and amongst the benefits I have known, ladies' voices and instruments other than the organ, such as strings, brass, and even drums, can be brought into the services of the Church without grotesque effect.

ERNEST C. SHEARMAN [*A.*]



9 Conduit Street, London, W., 18*th December* 1909.

CHRONICLE.

THE NOVEMBER EXAMINATIONS.

The Preliminary.

The Preliminary Examination, qualifying for registration as *Probationer R.I.B.A.*, was held in London and the undermentioned provincial centres on the 8th and 9th November. Of the 123 candidates admitted, claims for exemption from sitting for the Examination were allowed to the number of 35. The remaining 88 candidates were examined, with the following results :—

District	Number Examined	Passed	Relegated
London	46	26	20
Birmingham	4	3	1
Bristol	7	5	2
Cardiff	3	2	1
Glasgow	3	2	1
Leeds	6	5	1
Manchester	16	8	8
Newcastle	3	3	0
	88	54	34

The 89 passed and exempted candidates, who have been registered as Probationers, are as follows :—

ACKROYD : Samuel William ; Duke Street, Elland, Yorks.
ADAMS : Walter Alwyn Cole ; 13 Glazbury Road, W. Kensington.
ALISON : Walter ; c/o McKinvin, 134 W. Graham Street, Glasgow.
ANGLIN : Samuel Norman ; Temple Acre, Harrop Road, Hale.
APPERLY : Eric Langton ; "Craigie House," 56 Lancaster Gate, Hyde Park, W.
ARTHUR : John Llewellyn ; Hilton, Llandaff.
ASHBOLT : John Sidney ; 10 Exmoor Road, Southampton.
BAGENAL : Philip Hope Edward ; 3 More's Garden, Cheyne Walk, S.W.
BELL : Charles ; 4 Baxter Park Terrace, Dundee.
BETTS : Albert William ; 630 Radford Road, Old Basford, Nottingham.
BHEDVAR : Sohrab Keikhosru ; 38 Brixton Hill, S.W.
BLYTH : Charles Kydd ; 206 St. Paul's Road, Highbury, N.
BODDINGTON : Frederick Eckersley ; Government Architect's Office, Brisbane.
BROADHEAD : Frank Arthur ; 31 Douglas Rd., Nottingham.
BROWN : Percy Norman ; Hawthorn Bank, Holmfirth, nr. Huddersfield.
COBB : Robert Stanley ; Romney, Shortlands, Kent.
COOK : Charles Reginald ; "Pierafield," 102 Manor Road, Wallington, Surrey.
COURT : Harold William ; "Coningsby," Hyde Vale, Greenwich, S.E.
CRABTREE : Enos James ; "Sandsfoot," Southbank Road, Southport, Lancs.
CROSSLAND : Harry Ewart ; Station Road, Sutton-in-Ashfield, Notts.
CURWEN : John Spedding ; 26 Highgate, Kendal.
DALY : Thomas ; 8 Hagg Crescent, Johnstone, Renfrewshire, N.B.
DEAR : Frank Twydale ; 210 Lambeth Road, S.E.
DOD : Harold Alfred ; 24 Liverpool Road, Birkdale, Lancs.
DONALDSON : Benjamin ; 238 Chillingham Road, Heaton, Newcastle-on-Tyne.
DONGER : William James ; 16 St. Cross Road, Winchester.
EDMUNDS : Hywel Carey ; 26 Cradock Street, Swansea.
EDWARDS : Sidney James, B.A.Cantab. ; The Grange, Royston Park, Pinner.
FARR : Reginald Percy ; c/o Hongkong Shanghai Bank, Lombard Street.
FLETCHER : Donald ; Kirk House, Uttoxeter, Staffs.
FOX : Walter Ernest ; Morton, Gainsborough, Lincs.
GODWIN : William Hubert ; 6 Second Avenue, Selly Park, Birmingham.
GRATTON : Stacey ; 30 Devon Square, Newton Abbot.
GREGORY : Hubert ; Woodburn, Ben Rhydding, Yorks.
HAMILTON : Thomas Cressey ; 74 Station Road, Wallsend-on-Tyne.
HARMAN : Stanley William ; Brookdale, Manor Road, Teddington, Middlesex.
HEMM : Gordon ; Ash Lea, 12 Manchester Road, Heaton Chapel, nr. Stockport.
HICKMAN : Ernest James ; 134 Sherlock St., Birmingham.
HICKSON : Harry Armitage ; "Ivy Dene," Netherton, nr. Huddersfield, Yorkshire.
HOLROYD : Frank ; Laurence Villa, Woodlesford, nr. Leeds.
HORTON : Alfred William ; 134 Whitaker Road, Derby.
HOTEN : Sydney ; Westbourne, Stonebroom, nr. Alfreton.
HUNTER : Arthur ; Ingram House, Stockwell Rd., S.W.
JAMES : John Alfred Barnes ; 13 Plough Terrace, Port Talbot.
JONES : Rees ; Liverpool House, Paremain, Carmarthen.
KNIGHT : Walter John ; 20 All Saints' Road, Gloucester.
LE GRICE : Clifford Herbert ; "Enfield House," Marina, Lowestoft.
LENNOX : Hugh ; Milton, Ashgrove Street, Ayr.
LEWIS : Glyndwr Morrison ; 37 Highbury New Park, N.
LIPSCOMB : Sidney George ; 48 Chapel Street, Edgware Road, N.W.
LITTEN : Horace Edgar ; Highmeade, Pope's Grove, Twickenham.
MACPHAIL : Duncan St. Clair ; 40 Warrender Park Terrace, Edinburgh.
MARCH : John Ewart ; West Street, Axbridge R.S.O., Somerset.
MARCUCCI : Dario ; 11 Granville Road, Southfields, S.W.
MOORE : Joseph ; Sunny Bank, Beighton, nr. Sheffield.
MOORSOM : Raisley Stewart ; Bedales, Petersfield, Hants.
MORLEY : Cyril Savage ; 44 Bromley Road, Beckenham.
MOSCROP : William Noel Jobson ; Ashcroft, Darlington.
NORRIS : Walter ; Chamber Mount, Chamber Rd., Oldham.
ORME : Thomas John ; 106 City Road, Birmingham.
PARKES : Edgar Mainwaring ; 180 London Road, Northwich.
PEERMAHOMED : Abdulla Bhanji ; Christ's College, 4 St. Germans Place, Blackheath, S.E.
PROFFITT : George Wallace ; 9 Longley Road, Walkden, nr. Manchester.
ROARTY : Stanislaus ; c/o Geo. W. Durrell, Esq., 14 Castlereagh Street, Sydney.
ROBINSON : Graham John ; 39 Catherine St., Salisbury.

ROGERS: Walter; 64 Market Street, Eastleigh.
RUSSELL: Andrew Laurence Noel; Glen Douglas, Jedburgh, Roxburghshire, N.B.
SAWER: John Seymour; "Summerfield," Westerfield Road, Ipswich.
SHANKS: Thomas Edwin Thornton; Mount Beacon House, Landsdowne, Bath.
SIMMONS: Cecil George; 23 Oppidans Road, Primrose Hill, N.W.
SMITH: Arthur; West Hill Villa, West Hill Road, Luton, Beds.
SOMERFORD: Thomas Retford; 59 St. James's Road, Brixton, S.W.
STEVENS: Thomas Tearle; 117 Fornham Road, Bury St. Edmund's.
TAYLOR: John Alexander Chisholm; The Manse, Waterhead, Oldham.
TEMPLAR: William Richard; 102 Aldborough Road, Seven Kings.
TEULON: Cedric Maurice; Southbridge Lodge, Croydon.
THOMAS: George; 80 Hulton Street, Moss Side, Manchester.
THOMAS: William Norman; 236 Nantwich Road, Crewe.
TRISCOTT: Harris Stephens; 42 Hill Park Crescent, Plymouth.
WALKER: Harold Frederick; "Fair View," Little Heath, Potter's Bar, Herts.
WELCH: Henry; 30 Forbes Road, Edinburgh.
WEST: Archibald John; 150 Birkin Avenue, Nottingham.
WILLIAMS: Frederick Ernest; 15 Tennyson Road, Small Heath, Birmingham.
WILLIAMS: John Gerrard; 27 All Saints' Road, Clifton, Bristol.
WILLIAMSON: Henry Rochead; 19 Morningside Place, Edinburgh.
WINCH: Kenneth Mark; 16 George St., Richmond, S.W.
WINTER: Ronald; 26 Maryfield Terrace, Dundee.
WOODROFFE: Norman Frederic; 51 Lincoln's Inn Fields, W.C.
WORTHINGTON: Charles Edmond; 21 Upper Phillimore Place, W.

The Intermediate Examination.

The Intermediate Examination, qualifying for registration as *Student R.I.B.A.*, was held in London and at the undermentioned provincial centres on the 8th, 9th, 11th, and 12th November. One hundred and eight candidates were examined, and the results are reported as follows:—

District	Number Examined	Passed	Relegated
London	69	35	34
Bristol	5	2	3
Cardiff	4	2	2
Glasgow	3	2	1
Leeds	10	4	6
Manchester	11	5	6
Newcastle	6	1	5
	108	51	57

The names and addresses of the successful candidates are as follows, in order of merit, as placed by the Board of Examiners:—

[The initial "*P.*" signifies *Probationer R.I.B.A.*]

KNIGHT: Frank Wardel [*P.* 1906]; 9 Wellington Square, Chelsea, S.W.
RUTTER: William Arthur [*P.* 1906]; 1 Princes Street, Cardiff.
SELWAY: Edward Ralph Douglas [*P.* 1905]; 38 Grafton Square, Clapham, S.W.
SCOTT: Bernard Wardlaw Habershon [*P.* 1905]; 125 Rodenhurst Road, Clapham Park, S.W.
HOLLAND: Harry Dawber [*P.* 1901]; 349 Spring Bank, Pemberton, Wigan.
ROBINSON: Harold Layton [*P.* 1906]; 19 Scarborough Road, Leytonstone, Essex.
BROAD: Kenneth Stephen [*P.* 1908]; 166 West Hill, Putney, S.W.
MOIR: David James [*P.* 1903]; 95 West Graham Street, Garnethill, Glasgow.
HENDRY: Harry Duncan [*P.* 1908]; 60 Herongate Road, South Wanstead, Essex.
WEST: James Grey [*P.* 1901]; H.M. Office of Works, Cardinal House, Carlisle Place, Westminster, S.W.
HOUSTON: William Wylie [*P.* 1906]; 110 Fitzroy Avenue, Belfast, Ireland.
MORLEY: William Brighten Rise [*P.* 1907]; 57 Christ Church Road, Norwich.
VOELKEL: William [*P.* 1907]; 21 Denton Terrace, Castleford, Yorks.
GUNTON: William Henry [*P.* 1909]; Finsbury House, Blomfield Street, E.C.
PEDLEY: Ernest William [*P.* 1907]; Atherton House, Grafton Road, Derby.
HAGUE: Horace Vincent De Courcey [*P.* 1908]; "Roslyn," Bloomfield Road, Blackpool.
MACMILLAN: Alec Lowe [*P.* 1901]; 85 Cambridge Road, Southport, Lancashire.
KNYVETT: John Seymour [*P.* 1904]; 51 Hagley Road, Edgbaston, Birmingham.
SHEARS: Reginald [*P.* 1906]; 38 Anerley Road, Westcliff-on-Sea, Essex.
MILLER: Stanley Russell [*P.* 1907]; 112 Avenue Road, Acton, W.
OWEN: Albert Henry [*P.* 1907]; 71 Marlborough Road, Upper Holloway, N.
KNOTT: Arthur John [*P.* 1908]; "Triscombe," Neva Road, Weston-super-Mare.
NIGHTINGALE: Frederick Bayliss [*P.* 1906]; 47 West Side, Wandsworth Common, S.W.
BRADLEY: Harry [*P.* 1904]; 11 Handsworth Road, Blackpool.
CLARK: Walter Llewellyn [*P.* 1905]; The Hampden Club, Phœnix Street, N.W.
COLBECK: Henry [*P.* 1907]; 13 Milton Place, Halifax.
COWPER: Robert Stephen [*P.* 1902]; 23 St. Dunstan's Road, West Kensington, W.
DAVIES: Joseph Charles Gladstone [*P.* 1904]; Tanyrallt, Morriston, Glam.
EVANS: Charles Glynn [*P.* 1904]; 13 New Street, Neath.
FURNISS: Richard William [*P.* 1905]; 14 William Street, Loughborough.
GILKS: Stephen Langton Clowes [*P.* 1902]; 9 Carlton Road, Putney, S.W.
HALL: Montagu Ashley [*P.* 1905]; Newport Cottage, Lincoln.
HALLETT: George Farncombe [*P.* 1907]; 152 Eastern Road, Brighton.
HARRISON: Samuel [*P.* 1904]; Aldersyde, Linthorpe, Middlesbrough.
JESSOP: Bernard [*P.* 1907]; Bank Cottage, Kimberley, Notts.
KNAPP-FISHER: Arthur Bedford [*P.* 1907]; 2 Strathmore Gardens, Kensington.
LAY: Cecil Howard [*P.* 1904]; Aldringham, Saxmundham Suffolk.
LOWRY: Robert [*P.* 1908]; Carlton House, Bishop's Road, Bayswater, W.
MARTIN: Cyril Frederick, B.A.Cantab. [*P.* 1908]; Eyton, Farquhar Road, Edgbaston.
NEWHAM: Theodore Nelson [*P.* 1907]; Bockholme, Hastings.

PICKMERE: Travers [*P.* 1903]; 3 East Albert Park, Liverpool.
REID: Claud Boileau; 307 Vauxhall Bridge Road, S.W.
RYLATT: Arthur [*P.* 1904]; Sculcoates House, Beverley Road, Hull.
SMEED: Charles Alfred [*P.* 1905]; 24 West Ham Lane, Stratford, E.
SURVEYOR: Merwanjee Framjee [*P.* 1908]; 19 Craven Street, Strand, W.C.
VEY: Arthur Edwin [*P.* 1905]; 48 Thornton Avenue, Chiswick, W.
WALKER: Richard [*P.* 1907]; 307 Vauxhall Bridge Road, S.W.
WELCH: Herbert Archibald [*P.* 1907]; 47 Albert Street, Regent's Park, N.W.
WHITEHEAD: Thomas Gustavus [*P.* 1908]; 1 Dunheved Road North, Croydon.
WILKS: John [*P.* 1904]; 62 Monton Street, Moss Side, Manchester.
WYLDE: Frederick Charles [*P.* 1905]; 2 Bulkeley Road, Norbury, S.W.

Exemptions from the Intermediate Examination.

The following candidates, who had attended the architectural courses and obtained First-class Certificates at the schools of architecture of the institutions mentioned against their names, were granted exemption from sitting for the Intermediate Examination, and have been registered as *Students R.I.B.A.*:—

CABLE: Robert William [*P.* 1905]; 11 Acre Lane, Brixton, S.W. [Architectural Association.]
CLARKSON: George Flint [*P.* 1905]; 43 Holland Road, Kensington, W. [Architectural Association.]
DOD: Harold Alfred [*P.* 1909]; 24 Liverpool Road, Birkdale, Lancashire. [Liverpool University.]
FAREY: Cyril Arthur [*P.* 1906]; 11 King's Gardens, West End Lane, N.W. [Architectural Association.]
GRAEME: Alan Vincent Sutherland [*P.* 1906]; 32 Vincent Square, Westminster. [Architectural Association.]
HAKE: Guy Donne Gordon [*P.* 1904]; 9 Park Mansions, South Lambeth Road, S.W. [Architectural Association.]
HETT: Leonard Keir [*P.* 1904]; Hapstead, Ardingly, Sussex. [Architectural Association.]
HOME: Geoffrey Wyville [*P.* 1905]; 99 Gurterstone Road, West Kensington, W. [Architectural Association.]
JONES: Thomas Anthony [*P.* 1908]; Exton Grove, Bishop's Waltham, Hants. [University College, London.]
LEVY: Arthur Louis [*P.* 1905]; 25 Netherhall Gardens, N.W. [Architectural Association.]
LODGE: Thomas Arthur [*P.* 1906]; "Warlies," Arnison Road, E. Molesey, Surrey. [Architectural Association.]
MATTHEWS: Bernard Frank [*P.* 1905]; Ingram House, Stockwell Road, S.W. [Architectural Association.]
PIGOTT: Richard Mountford [*P.* 1905]; 1 Earlsfield Road, Wandsworth Common, S.W. [Architectural Association.]
PRYNNE: Charles Edward Fellowes [*P.* 1905]; 3 Grange Road, Ealing. [Architectural Association.]
ROBINSON: Alfred Douglas [*P.* 1907]; 29 Beacon Hill, Camden Road, N. [Architectural Association.]
SWINDELLS: Francis Harold [*P.* 1905]; 60 Belsize Avenue, Hampstead, N.W. [Architectural Association.]
TANNER: Edwin John [*P.* 1906]; Rothbury, Beckenham, Kent. [Architectural Association.]
VOYSEY: Charles [*P.* 1906]; 14 Briardale Gardens, Hampstead, N.W. [Architectural Association.]

Final and Special.

The Final and Special Examinations, qualifying for candidature as *Associate R.I.B.A.*, were held in London from the 18th to the 26th November. Of the 114 candidates examined, 43 passed, and 71 were relegated to their studies. The names and addresses of the passed candidates are as follows:—

["*P.*" and "*S.*" = *Probationer* and *Student.*]

AINSWORTH: John Cooper [*P.* 1903, *S.* 1908]; "Arnold Hill," Gee Cross, Hyde.
ALEXANDER: George Luard [*Special Examination*]; 132 Cambridge Street, Warwick Square, S.W.
ALLEN: John Gordon [*P.* 1902, *S.* 1907]; Dashmonden, Holmdale Road, West Hampstead, N.W.
ATKINSON: Robert [*Special Examination*]; 2 South Square, Gray's Inn, W.C.
AUTY: Josiah [*Special Examination*]; Union Bank Chambers, Morley.
BLUHM: Quentin Mangnall [*P.* 1902, *S.* 1904]; "Whitecote," Devonshire Road, St. Anne's-on-the-Sea.
BRYAN: Arthur Francis [*P.* 1902, *S.* 1906]; c/o C. Harrison Townsend, Esq., 32 Queen's Road, St. John's Wood, N.W.
BURSTOW: George Herbert [*Special Examination*]; 107 St. Leonard's Road, Hove, Brighton.
CHAPMAN: Richard Thwaite [*P.* 1904, *S.* 1906]; "Glenthorne," 535 Chorley Old Road, Bolton.
CLAYPOLE: Edward Ernest Blunt [*P.* 1898, *S.* 1902]; Strathmore, 32 Kingscourt Road, Streatham.
DAVIDSON: John Adam [*P.* 1905, *S.* 1906]; 6 Clarence Avenue, Londonderry, Ireland.
DAVIS: Claude William [*P.* 1902, *S.* 1906]; 288 Pershore Road, Edgbaston, Birmingham.
DICKMAN: Harry Alderman [*P.* 1904, *S.* 1906]; 32 Albert Grove, Nottingham.
DOUGLAS: Alexander Houston [*P.* 1901, *S.* 1905]; 83 St. Mark's Road, North Kensington, W.
ELTON: Percie Ion [*Special Examination*]; 113 Gloucester Road, South Kensington, S.W.
FINN: Edwin [*P.* 1902, *S.* 1905]; Ethelbert Road, Canterbury.
GOODCHILD: William [*P.* 1904, *S.* 1906]; Craven House, Hervey Street, Ipswich.
GUTHRIE: Leonard Rome [*Special Examination*]; 13 John Street, Adelphi, W.C.
HADWEN: Noel Waugh [*P.* 1905, *S.* 1909]; Kelroyd, Triangle, Yorks.
HANSCOMB: Charles Ernest [*P.* 1909, *S.* 1905]; 13 Algiers Road, Ladywell, S.E.
HASTEWELL: Robert Edwin [*P.* 1901, *S.* 1903]; Westgate Chambers, Haltwhistle, Northumberland.
HAWKINS: Frederick George [*P.* 1908, *S.* 1908]; Church Walk, Hendon, N.W.
HEPPLE: Francis Henry [*P.* 1903, *S.* 1907]; 27 St. George's Square, Worcester.
HOLLIS: Henry Clifford [*P.* 1902, *S.* 1903]; 59 Crowndale Road, Oakley Square, N.W.
MAXWELL: William Charles [*Special Examination*]; 29 Donegall Street, Belfast.
MILBURN: William, jun. [*P.* 1902, *S.* 1908]; 8 Thornhill Park, Sunderland.
MOBERLY: Arthur Hamilton [*P.* 1907, *S.* 1908]; 10 Campden House Road, W.
MUNNINGS: Joseph Fearis [*Special Examination*]; c/o H. Strutton, Esq., "Baramati," *via* Diksal, Poona District, Bombay Presidency, India.
ORME: Robert Wright [*P.* 1902, *S.* 1904]; 3A Orchard Road, St. Anne's-on-Sea, Lancashire.
OSLER: Francis [*S.* 1904]; 44 Weltje Road, Hammersmith, W.
PAGE: James [*P.* 1899, *S.* 1908]; 50 Arcadian Gardens, Bowes Park, N.
ROBERTS: David John [*Special Examination*]; Holly Lane, Erdington, near Birmingham.

ROBERTS: William John, M.A. [*P.* 1908, *S.* 1908]; 66 Yew Tree Road, Withington, Manchester.
ROWLEDGE: George Henry [*P.* 1902, *S.* 1905]; 22 Parkfield Street, Rusholme, Manchester.
SAGAR: William Henry [*P.* 1904, *S.* 1907]; 6 Wellington Square, Chelsea, S.W.
SCOTT-WILLEY: Hugh Henry [*P.* 1902, *S.* 1906]; Somersfield, Reigate.
STONE: George Marrison [*P.* 1900, *S.* 1904]; 7 Fairmount Road, Brixton Hill, S.W.
STONEHOUSE: Charles [*P.* 1900, *S.* 1903]; Irving Place, Blackburn.
THOMPSON: Morris [*P.* 1901, *S.* 1904]; Redcot, Clifton Drive, Lytham, Lancs.
TROUP: Francis Gordon [*P.* 1907, *S.* 1909]; c/o Mrs. Aspland, 47 Linden Gardens, Bayswater.
WARE: Vivian [*P.* 1902, *S.* 1906]; 83 Richmond Wood Road, Bournemouth.
WOOLLATT: John [*P.* 1904, *S.* 1905]; c/o Messrs. Evans & Sons, Eldon Chambers, Nottingham.
WRIGHT: Cecil Laurence [*P.* 1898, *S.* 1905]; The Lyntons, New Malden.

The following table shows the number of failures among the seventy-one relegated candidates in each division of the Final Examination :—

I. Design	51
II. Mouldings and Ornaments	61
III. Building Materials	15
IV. Principles of Hygiene	20
V. Specifications	27
VI. Construction, *Foundations, &c.*	33
VII. Construction, *Iron and Steel, &c.*	22

Colonial Examinations.

The following candidates passed the Colonial Intermediate Examination held in Sydney, November 1908 :—

KEITH-HARRIS: Boyston John [*P.* 1907]; 1 Merchant Street, Stanmore, near Sydney, N.S.W.
ROARTY: Stanislaus [*P.* 190]; "Guernsey House," 42 Lansdowne Street, Surry Hill, Sydney.

The following candidates passed the Colonial Special Examinations qualifying for candidature as *Associate R.I.B.A.* held in Sydney last June :—

SUTCLIFFE: Hartley; 50 Lewisham Road, Windsor, Melbourne, Victoria, Australia.
TAYLOR: Edward Alexander; Ben Side, Wollstonecraft, North Sydney, Sydney, N.S.W.

The following candidate passed the Special Examination held in Johannesburg in July last :—

BEALL: Walter John; Public Works Department, Pietermaritzburg, Natal.

A Student of the School of Architecture, University of Liverpool.

Professor Reilly sends the following note on the student-career of the author of the Paper on the Greek Revival in England published in the present issue, pp. 177–92 :—

Mr. L. B. Budden was a student in the School of Architecture, University of Liverpool, during the sessions 1906–7, 1907–8, 1908–9, working under the old system for a B.A. degree with honours in architecture. If he had entered a year later he would have come within the new B.Arch. course. One of the regulations for any honours degree in the University is that a thesis, representing a certain amount of original investigation, must be presented before the student can sit for his examination. With the architectural students it has been customary to insist that a set of measured drawings illustrating the subject of the thesis should be submitted with it. In this case Mr. Budden sent in drawings of the Customs House and Seaforth Hall, both in Liverpool. Mr. Budden was eighteen years of age when he entered the school three years ago. His first year's study was devoted to general work, including languages, mathematics, and history, for his Intermediate Examination. His architectural studies were confined, therefore, to his last two years, and his work shows what can be accomplished in this time by a hard-working student of good abilities under an organised system of training. On leaving the school last July, Mr. Budden was awarded a University Scholarship of £50 with his first-class degree, and the Holt Travelling Scholarship, also of £50, for designs made during his course of study. To these two the British School at Athens, in recognition of his knowledge of Greek architecture, has added another £50, on condition that he works in the School at Athens for a short time. He has therefore left for an extended tour in Italy and Greece with £150 to his credit, which, it will be generally agreed, is a very satisfactory start for a student.

In a later note Professor Reilly says he has just learnt that Mr. Budden is engaged at Athens on a restoration of the Propylæa, from measurements of the actual stones, under the direction of Mr. Dawkins, the head of the British School.

Practical and Theoretical Training

An interesting and suggestive Paper on this subject was read by Mr. R. Weir Schultz before the Manchester Society of Architects on the 10th of last month.* After a criticism of the old method of architectural training, and of some of the new methods now on their trial, Mr. Schultz asked, Is our modern system based on right lines for producing thoroughly competent, practically trained architects capable of dealing with all the complex problems which go to the making of a fully thought-out building, complete in every detail, pleasing to look on, of good proportion and detail, and entirely suitable for its purpose in every respect?

Continuing, Mr. Schultz said :—

> What should an architect require to know? If we put it all down in black and white, I think most of us will agree that he apparently ought to know more than it is possible for any one man to acquire in a lifetime. But, if we analyse things a little, we may find that part of the knowledge need only be general, sufficient, in fact, to enable him to get at his facts through the right channels, and know them when he gets them. In practical things he ought to be conversant with materials, their natures and limitations,

* The Paper is published in full in the *British Architect* of the 19th November.

a bit of a geologist, a bit of a chemist, a bit of a botanist or arboriculturist, a considerable portion of an engineer, a bit of a lawyer, and a man of affairs generally. He ought to be able to draw accurately rather than artistically, have a sense of good proportion, orderliness and arrangement, some idea of sculpture and decoration, a knowledge of colour and its application, be a bit of an electrician, a sanitary expert, know something of acoustics, light and heat, and be able to survey and have sufficient knowledge of figures and costs to be able to control expenditure, and so on. You will see, therefore, that the range of knowledge necessary to proficiency is a wide one.

In my opinion, the most satisfactory form of training is that which is founded on actual contact with practical everyday work, and I therefore think and feel very strongly that a youth who intends being an architect should, as soon as ever he can, get into touch with real building—not merely as an onlooker, but as a participant. He will then gradually get to know his materials, their proper uses, their limitations, their various behaviour under differing conditions, and how they should be handled to get the best results, structurally as well as economically.

He ought to learn how to put things together by actually doing some part himself; for instance, by cutting out and framing up a door or a window, by laying a floor or a piece of lead flat, by sweating a lead joint—in fact, by getting into intimate touch with the hundred and one practical details that go to the completion of a building. When he has attempted to do a few things, even if only in one branch, his powers of observation will become keener, he will look at things in other branches from the practical point of view, and be able to grasp the bearing of things so much quicker, so much more accurately.

He may draw dozens of full-size details of, say, windows or doors in an architect's office, and yet not be able to thoroughly grasp practically how the things are actually put together; but once he has tried to do it for himself he will know most of what there is to be known, and will not forget it.

Then in such matters as, say, the relative proportion of sand and lime or cement to make good mortar, where so much depends on the nature of the sand, a little practical experience is worth pages of text-book dissertation.

At times, when he goes off for a holiday, either at home or abroad, and takes to studying the works of the past, he should see that he looks behind the surface, does not concern himself only with shapes and forms, and even proportions, but gives some attention to the how and why of it all—realises that there were difficulties which had to be overcome, problems which had to be solved, limitations which had to be observed—difficulties of material, of level, of construction, problems of arrangement, of planning, perhaps of lighting, limitations of site, of cost (for evidences of this will often assert themselves clearly, even when of actual record there is none). Some three or four years ago perhaps, when going round the show of students' work at the R.I.B.A., I was much struck with one set of drawings, one only out of all the lot which had been sent in, for, I think, the Pugin Studentship. They were not perhaps the most outwardly attractive set there. I forget whether they received even an honourable mention, but they showed evidence that their author had looked at his old work, not on the surface only, but through and through; that he had realised the difficulties, appreciated the problems, and set himself to show how they had been solved, and to realise clearly how the old builders really built. That youth, who hailed from not very far from this city, has recently sent from the East most excellent drawings, analysing old buildings as, perhaps, they have never been analysed before, and these will form, when published, a very valuable addition to the records of the history of architecture.

Now I should like to say very clearly—and I fear a large number of you may not agree with me, but I cannot help that—the sooner we give up talking about orders and styles the better. Let us forget there were such things. Many of us wish this had been given up long ago, for now the client has got hold of the jargon, and he often comes to you with a ready-made scheme such as that his house is to be, say, in the Queen Anne style (or, perhaps, this has gone out of fashion now, has it not?), with a Georgian dining-room, a Louis Seize drawing-room, and a Tudor hall; and the amusing thing is that he expects also a modern liveable house, with proper sanitation, electric light, lifts, and telephones. Now, do let us, for goodness' sake, try to forget about the five orders of architecture (or were there really only three, after all?), and about Early English and Decorated, Queen Anne and Georgian, and treat each proposed building as a problem to be solved in the best way from all points of view. Let the type grow out of the requirements, the kind of material to be employed, the nature of the construction, and so forth. The proportion will come all right if your problem is properly solved. If ornament is necessary or suitable, use it with discrimination and restraint, and let your building express the purpose for which it has been built, and it will be interesting and full of life, not a plagiarism of dead forms and details.

But we are wandering away again from our subject, which is practical and theoretical training. I have said that practical training can best be got in actual touch with real building, but theoretical training should go along with it, and here, to my mind, the basis should be constructive. All good building is based on proper construction. Modern methods of construction are largely a matter of engineering; hence our modern teaching should be on the lines of engineering as applied to building.

Now, whatever is to be the outcome of things in the future, we must concern ourselves most with immediate possibilities and how to obtain the best results with the facilities which are reasonably available.

If there are classes for the crafts connected with building in technical schools of this city—and there surely must be—and if such classes are conducted on practical lines, I would recommend those students who have not the opportunity of coming in direct and continuous contact with real building to attend some of these classes, take off their coats, roll up their sleeves, and do something with their hands. Then some time should be devoted to the scientific study of structural problems at a school of engineering; and here I am specially addressing myself to students—learn to know about your materials, go to a quarry to see stone actually quarried, go to a mason's yard and see it being dressed, try to do some yourself, if he will let you—I doubt if he will—see it built in position, look at older buildings where the same stone has been used, see how it weathers under different conditions, whether the

mouldings decay rapidly (if so, it should not be moulded), what form of surface wears best, and you will find lots of wrong uses and some right ones; but before you have done you will know, or ought to know, what to avoid doing.

Learn something in a similar way about limes, sands, wood, plaster, paint, in short everything that goes to make a building. You cannot do it all at once, but you are young, and have the years before you.

If you give half your time to these things, you can give the other half to your friend the architect, and learn how to work out problems of planning actual buildings—of much more use to you than working on fancy designs at art schools—get him to let you go and see them as they go up, and, if possible, live some time on the job you have worked on.

In the spring and summer, when there are flowers in the garden, learn to draw them and get some inspiration for your ornament from them, and not from copying casts of ornamental design, fine in themselves, but parts of a lost tradition.

I look forward to the possibilities of an arrangement with reliable builders in cities, whereby young architects can spend part of their time under the foremen, not fooling, but doing definite duties and learning things. Part of the premium formerly paid to the architect might be devoted to securing this advantage, and I think this should come first, and then the engineering course—the architect's office last. By this means the pupil will go to his scientific training with some knowledge of materials, and of practical construction, and to the architect with at least some knowledge of all these things, and he will really then be of some actual use to him, if he looks at it from a more or less selfish point of view.

Now a further word in conclusion to the student. In all you do, and whatever you do, keep your eyes and ears open, look and observe, listen and remember, ponder and digest, and see that you are convinced that there is a proper reason for everything that is done; and, above all, do not think that the study and practice of architecture and the art of building is easy and simple, and that it can be learnt in a year or two, but make up your mind that you are to be a learner all the time, and by-and-by you will perhaps have a chance of directing work that will, while interesting you, interest others as well, and that may—who knows?—be the means of advancing a step further the reasonable progress of architecture, "the Queen of the Arts."

The Carpenters' Company: Lectures on Arts connected with Building.

The Carpenters' Company has decided to give a series of lectures beginning next month on the arts connected with building, in continuation of those delivered in the early part of this year. The lectures are intended in the first place for all craftsmen and those engaged in actual trades in connection with the constructive arts, but all of either sex and of any trade or profession are invited to attend. At the end of the course prizes will be offered to craftsmen and artisans who have attended at least eight lectures of this series. The following is the programme of the course:—

Jan. 12.—What is Artistic Craftsmanship? by Prof. Beresford Pite [*F.*].
Jan. 19.—The Art of Building, with special reference to the use and abuse of materials, by Mr. M. H. Baillie Scott.
„ 26.—The Carpenter's Craft, by Mr. Banister Fletcher [*F.*].
Feb. 2.—The Joiner's Craft, by Sir Brumwell Thomas, [*F.*].
„ 9.—Native Craftsmanship in Timber, Brick, and Stone before the 18th Century, by Mr. Arthur Stratton [*A.*].
„ 16.—The Art of the Lead Worker, by Mr. Lawrence Weaver, F.S.A.
„ 23.—The Art of the Plasterer, by Mr. George P. Bankart.
Mar. 2.—Castles in the Air, by Mr. C. F. A. Voysey.
„ 9.—The Use of Coloured Materials in Building, by Mr. Halsey Ricardo [*F.*].
„ 16.—Mural Painting, by Prof. G. E. Moira [*H.A.*].
„ 23.—Coloured Reliefs and Mosaic, by Mr. R. Anning Bell, R.W.S.
„ 30.—Sculpture as applied to Buildings, by Mr. F. W. Pomeroy, A.R.A. [*H.A.*].
April 6.—The Craft of Repairing Buildings, by Mr. Thackeray Turner, F.S.A. [*F.*].

Tickets of admission to the lectures can be obtained free from Mr. J. H. Freeman, The Clerk, Carpenters' Hall, London Wall, E.C.

Mr. T. J. Bailey's Retirement.

At the meeting of the Education Committee of the London County Council last week the General Purposes Committee reported that Mr. T. J. Bailey, the Schools Architect, would retire from the Council's service on 31st December, and recommended that he should have exceptional treatment with regard to his retiring allowance. The Committee placed on record its fullest sense of the very valuable services rendered by Mr. Bailey.

Mr. Key paid a warm compliment to the work of the retiring architect. London schools had, he said, greatly benefited during Mr. Bailey's office, and his improvements had raised the standard of architecture, not only in England, but all over the world. In parting with him the Council was parting with the first architect to make a professional study of that particular branch of architecture. He was sure the Council wished Mr. Bailey many years of retired life, and heartily appreciated his valuable services to London.

Obituary.

At the General Meeting last Monday Mr. Henry T. Hare, *Hon. Secretary*, announced the decease of the following members:—

Henry Bayly Garling, elected *Associate* in 1843 and *Fellow* in 1857, who died on the 4th inst., aged eighty-eight years. Born in London in 1822, Mr. Garling was educated at King's College, London. He adopted his father's profession of architect, and whilst a student of the Royal Academy in 1842 he gained the Silver Medal for measured drawings, and in the following year the Gold Medal for a design for a Royal Academy of Music. In 1847 he was awarded the Silver Medal of the Insti-

tute for an essay upon sculpture and sculptured ornament. Mr. Garling began practice in 1848, and in 1857 he won in competition the first premium of £800 for the best design for the new War Office, a design which he was never called upon to execute. Lord Palmerston later endeavoured to secure his employment upon the new Foreign Office, but the work was ultimately entrusted to Sir Gilbert Scott. In 1866 he was chosen one of eleven competitors for the new Law Courts, the final choice resting upon Mr. G. E. Street, who carried out the work. Mr. Garling retired from active practice in 1879, and took up his residence at Folkestone, devoting much of his time to landscape painting. He was a great traveller and a great reader, and retained his intellectual gifts to the close of a long and useful life.

THOMAS WILLIAM CUTLER, elected *Associate* in 1873 and *Fellow* in 1879. Mr. Cutler served for some years on the Council prior to 1898, and had taken an active part in the affairs of the Institute. He was also a prominent member of the Sanitary Institute.

GEORGE CAMPBELL SHERRIN, elected *Associate* in 1882 and *Fellow* in 1898. He had served for some years on the Art Committee of the Institute, part of the time filling the office of Vice-Chairman. In his earlier years Mr. Sherrin exhibited with some success at the Royal Academy, and among his best work was a picture of The Gate House, Ingatestone. The originality and beauty of his designs exercised a considerable influence on architecture in Essex, where he began his career. He restored Lord Petre's seat near Brentwood, and reconstructed and built residences in all parts of that county, and in Surrey, Sussex, and the Isle of Wight. He also designed the Alexandra Hotel, Dovercourt, and the Southend Kursaal. Among his London works were Rayleigh House, Chelsea, for the Hon. Richard Strutt, and Cannon Street Buildings, offices in Carey Street, Lincoln's Inn, St. Mary-at-Hill House, Eastcheap, and premises in Clarges Street, Piccadilly, and Finsbury. As architect to the Metropolitan Railway Company Mr. Sherrin rebuilt Moorgate Street Station, Kensington High Street Station, with its arcade and adjoining shops, South Kensington Station, and Gloucester Road, the Monument, and Mark Lane Stations. About sixteen years ago he reconstructed Spitalfields Market. The branch of his work which, perhaps, afforded him most satisfaction was that connected with religious buildings, especially the dome of the Brompton Oratory, the new buildings at Douai College in France, and the re-erection, in Eldon Street, of the church of St. Mary Moorfields. In the last-named building there was sung on the day of his funeral a solemn requiem Mass. The funeral party afterwards travelled to Ingatestone, the interment taking place in the neighbouring parish of Frierning. Mr. Hare, in a brief reference to Mr. Sherrin's work last Monday, said it was not, he thought, as widely known as it deserved to be. He was a most earnest worker, and all his buildings bore evidence of his sincerity and of the extreme care and trouble he took in carrying out his design to a successful conclusion. His loss is a very serious one, not only to the Institute, but to the profession generally. Mr. Sherrin leaves a widow, with three sons, one of whom—Mr. Frank Sherrin—had been associated with him for many years in his practice, and three daughters.

The Preliminary Examination and Bristol University.

The Council, on the recommendation of the Board of Examiners, have resolved to recognise the Matriculation Examination of the University of Bristol as exempting from subjects I., II., III., IV., V., and VII. of the R.I.B.A. Preliminary Examination.

Reinstatement of a Fellow.

By a resolution of the Council under By-law 20, Mr. Joseph Barker Daniel Wall has been reinstated as a Fellow of the Royal Institute.

MINUTES. IV.

At the Fourth General Meeting (Ordinary) of the Session 1909-10, held Monday, 13th December 1909, at 8 p.m.—Present, Mr. Ernest George, *President*, in the Chair; 32 Fellows (including 14 members of the Council), 29 Associates (including 2 members of the Council), and several visitors—the Minutes of the Meeting held 29th November [p. 139] were taken as read, and signed as correct.

The Hon. Secretary having announced the decease of Henry Bayly Garling, Thomas William Cutler, and George Campbell Sherrin, *Fellows*, it was resolved that the regrets of the Institute for the loss it had sustained be entered on the Minutes of the Meeting, and that a message of sympathy and condolence be conveyed to the relatives of the late members.

The following members attending for the first time since their election were formally admitted by the President:—Arthur Benison Hubback, Richard Henry Weymouth, *Fellows*; Harry Courtenay Constantine, Henry Seton Morris, Joseph Seddon, George Edmonds Fitzgerald, Douglas William Stewart, William Francis Dickinson, *Associates*.

The Secretary announced that the following candidates had been nominated for membership: As *Associate*, Andrew Graham Henderson; as *Hon. Associates*, Arthur Stockdale Cope, A.R.A., and Arthur John Evans, D.Litt.Oxon.

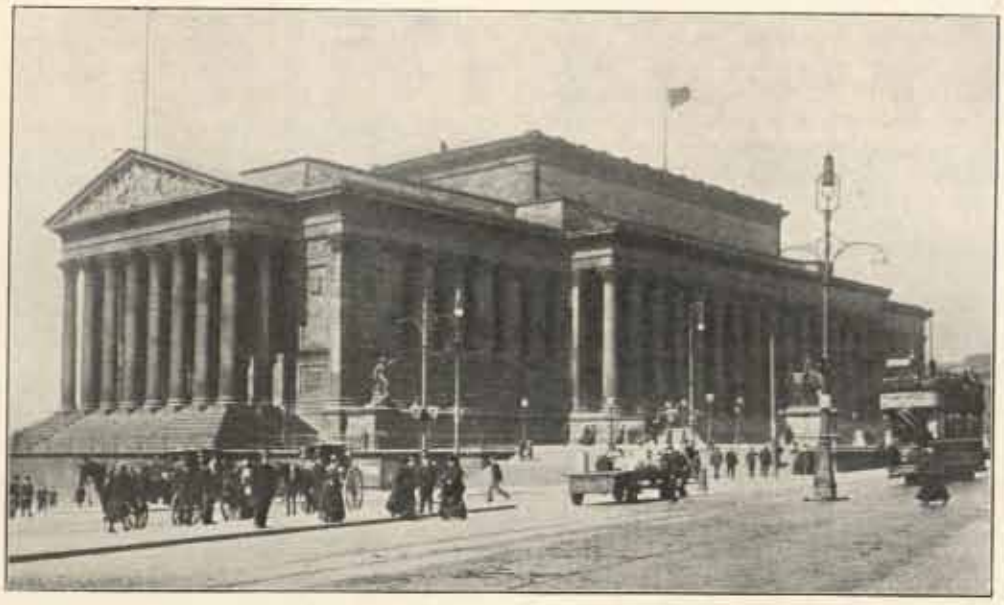
Mr. A. D. F. Hamlin, Professor of Architecture at Columbia University, New York, having read a Paper on ARCHITECTURAL EDUCATION IN AMERICA, a discussion ensued, and a vote of thanks was passed to the Professor by acclamation.

The proceedings closed, and the meeting separated at 10.35 p.m.

THE GREEK REVIVAL IN ENGLAND.*

A Thesis submitted for the B.A. Degree with Honours in Architecture at the School of Architecture, University of Liverpool.

By Lionel B. Budden, B.A.



ST. GEORGE'S HALL, LIVERPOOL. HARVEY LONSDALE ELMES, ARCHITECT.

THE most brilliant period in the history of architecture in England had its origin in nothing more serious than the antiquarian affectation of eighteenth-century polite society in matters relating to art. Yet it was a natural development from the Roman Renaissance, the inevitable result of an increase in archæological knowledge.

The whole system of education at the time—its intensely classical character—favoured the growth of the movement and served to give it reality to the general public. As early as the sixteenth century it had been quite usual for Englishmen to visit Italy for the sake of the higher culture to be obtained at the flourishing universities of Bologna and Padua,† and gradually, in constantly increasing numbers, connoisseurs either came themselves or commissioned agents to acquire those art treasures whose proper appreciation was already held to be amongst the necessary qualifications of every "compleat gentleman."* By 1620 the field of search had extended to Greece, and the intense rivalry which followed † resulted in the formation of those magnificent collections of antiques most of which have now passed into the possession of the British Museum.

At the beginning of the eighteenth century the idea of "the Grand Tour" as a necessary complement to a refined training, and of art as an essential element in education, became generally recognised. It was the universal acceptance of this creed that made the Greek revival in architecture possible. To English travellers "a love of the fine arts" had become synonymous with a visit to Athens (already ousting Rome as the most important show-place on the Continent), and many of these tourists published volumes on classic art copiously illustrated either by their own sketches

* The author of this Paper, who has since graduated with first-class honours in Architecture, and is now working at the British School at Athens, desires it to be mentioned that he has in preparation a *History of the Greek Revival in Great Britain and on the Continent*, and is at present engaged collecting materials for the work. See on an earlier page of the present issue Professor Beilly's note on Mr. Budden's student career at Liverpool.—Ed.

† Michaelis, *Ancient Marbles in Britain*, p. 55.

* Henry Peacham, *Compleat Gentleman*, 2nd ed., 1634, chap. xii., "Of Antiquities."

† For Arundel's and Buckingham's dealings at Constantinople, 1627, *vide* Michaelis, p. 13.

or those of some accomplished draughtsman.* The secret of the success of the movement lay in the existence of this large group of wealthy patrons imbued with notions of Hellenic art, and anxious to display erudition as arbiters of taste. In precisely this way the later course of international politics favoured its continued development. The Napoleonic wars closed the greater part of Europe to British tourists between 1790 and 1815, whilst the superiority of the English fleet in the Mediterranean still directed travel to Greece. The interest was thus maintained, and persisted undiminished, till the adoption of the new cult of mediæval romanticism by the accomplished *littérateurs* of the day, upon whom lay the difficult duty of explaining art to the artists, obscured the general perception of beauty.

Architecture in England prior to 1750 had remained unaffected by any purely classic influence. In general it was Palladian, and the differences in individual manner of expression were simply such as might reasonably have been expected from the English spirit working along Italian Renaissance lines. But with the publication of Dawkins and Wood's *Illustrations of Palmyra and Baalbec* (1750) admiration was excited for "Roman magnificence undiluted by Italian design,"† and Adam's *Spalatro*, published ten years later, served to further disconcert public taste. An unsettled eclecticism was produced amongst connoisseurs—a state of affairs highly favourable to the initiation of a new school of design.

It was then there appeared, in 1762, the first volume of *The Antiquities of Athens, measured and delineated by James Stuart, F.R.S. and F.S.A., and Nicholas Revett, painters and architects*. The result was such as not even the artists themselves could have anticipated. The work had been undertaken unostentatiously enough. In the summer of 1748 Stuart and Revett, whilst painting in Naples, discussed the possibility of an archæological expedition to Athens. The suggestion of the young men received practical encouragement from such wealthy amateurs as Lord Charlemont and the Marquess of Rockingham, though it was not till the end of January 1751 that they were enabled to leave Venice for Athens.

In the meantime Sir James Gray had secured their election to the Society of Dilettanti,‡ and it was consequently in a sense under the patronage of the Society that the splendid result of their labours was published. The effect of the work was almost incredible. "Grecian gusto" swept irresistibly over the country,* till conservative architects of the old school, like Ware and Gandon, could only lament what they regarded as the depravity of the time.

The ancient Hellenic artists were instantly held to be incomparable, and their sedulous imitation the only merit in modern artists. How far this furore was a genuine enthusiasm, and how far a fashionable pose, it would be difficult to determine now. In any case it was from the start misguided, and never attained to a comprehension of the aims of the greatest architects of the Revival. With typical limitation of mental vision, their monumental conceptions were regarded as pleasantly ingenious variations of fourth-century prototypes,†



THE BANK OF ENGLAND. SIR JOHN SOANE, ARCHITECT.

* Sir Richard Worsley, the author of the *Museum Worsleianum* [engravings by Pars], Edward Dodwell, Robert Walpole, William Gell, and Martin Leake, assisted in this way to give the Revival a dignified standing.

† Fergusson, *History of Architecture* (modern), vol. ii. p. 70.

‡ Cust, *History of the Society of Dilettanti*, p. 77. The unrivalled position which the Society then held in England as connoisseurs of infallible judgment ensured the success of the further projects which they were stimulated to undertake, and the publication of their *Ionian Antiquities* (1769)—the product of vigorous archæological research in the Levant, under the direction of Chandler and assisted by Pars (1764)—gave a distinction to the Neo-Greek movement which their subsequent publications served to confirm.

* An attempt to anticipate the work had been made by a Frenchman, Le Roy, "architecte, ancien pensionnaire du Roi à Rome," who, in 1758, published, under the title of *Les Dessins des plus beaux Monuments de la Grèce*, the result of his researches in Athens, made whilst those of Stuart and Revett were still in progress. But this rival venture was not successful in its intentions. It was altogether too inferior in general character, and made comparatively slight impression. Vide *La Biographie Universelle*.

† The full expression of this point of view at a later date is given by the egregious Fergusson, who, with a fine ignorance of his subject, treats the classic movement as an imitative compromise, and casually remarks: "If the Revival architects have a principle, it is that modern

mere products of honourable scholarship and intellectual agility.

The initial character of the movement, to a certain extent, justified this attitude. The works which Stuart found himself eagerly called upon to execute shortly after the publication of his researches—Lichfield House, in St. James's Square, for Lord Anson; Belvedere, in Kent, for Lord Eardley; a house in Portman Square; and the Infirmary of Greenwich Hospital *—are all, in a more or less degree, exercises in the new scholarship. But, in so far as their main composition is concerned, even they are free from the taint of literal copyism. And in the conceptions of the later masters of the Revival there is an originality that is only the product of innate genius expressing itself through a medium completely adequate. Had this rediscovery of Greek architecture been nothing more than the acquisition of so much barren information, to realise it would simply have remained the amusement of the dilettanti, and have been from the start an affair of literal reproduction. But its latent possibilities offered a more perfect expression to the spirit of our civilisation, and were sufficiently elastic to be applicable to its requirements.



THE BRITISH MUSEUM. SIR ROBERT SMIRKE, ARCHITECT.

It was not a case of a group of popular architects permitting their art to be vitiated by compliance with the demands of a public gone mad over some new thing. It was simply a process in "the inevitable development of facts"—the absorption of relevant matter by artists of more or less advanced tendencies—to endeavour to prevent which would have been a piece of the most futile conservatism.

The first of the greater architects to reveal in his work the influence of this freshly acquired material was Sir John Soane. Soane had received his early architectural education in the office of George Dance the younger. His exceptional talents, which had occasioned his promotion in Dance's office,* enabled him to gain the silver and gold medals at the Royal Academy—the latter by a design for a triumphal arch which also earned for him the Travelling Studentship. This gave him the means to spend some three years in Italy, chiefly in Rome, where he devoted himself to research work and the preparation of monumental designs. On his return, in 1780, he was entrusted with the erection of many country-houses, largely through the influential connections he had formed during his stay in Rome. It was whilst he was occupied with the execution of these works that he appears to have devoted attention to the study of Greek architecture and become imbued with an admiration for its perfection. His sources of information were indirect. He had never visited Athens himself and had to rely on drawings and engravings. To some temperaments these would have been "a precious bloodless substitute"; yet he unquestionably obtained stimulus and suggestion from them.

In 1788, on the death of Sir Robert Taylor, Soane was appointed architect to the Bank of England, and was soon after required to enlarge and practically rebuild the whole structure. Here was an occasion for a *tour de force* worthy of a George Dance or an Alexander Thompson. The utmost that could be expected from Soane was a dignified performance. An eclectic by training, he yet lacked that power of assimilation that was half the secret of Cockerell's competence, and his addiction to unfor-

purposes should be made subservient to foregone architectural styles" (*Modern Architecture*, vol. ii. p. 71).

* Later, whilst surveyor to Greenwich Hospital, "he renewed, with delicate Greek details, the interior of the chapel after the fire in 1779." *Vide* Belcher and Macartney, *Later Renaissance Architecture in England*, vol. i. p. 10. For list of buildings executed by Stuart and Revett for members of the Society of Dilettanti, vide *Antiquities of Athens*, vol. iv. pp. xxviii–xxxi.

* He was originally employed by Dance in the capacity of errand boy, and was later transferred to the office of Henry Holland. He was born in 1753, the son of a stonemason.

tunately eccentric detail*—a vice peculiarly noticeable in his later work—further hampered the full expression of his ideas. The ornament is deplorable, and the ill-advised profusion of small sunk panels and insignificant blind windows destroys all breadth in the façades. The whole building, moreover, rests upon too low a stylobate, and the recessed colonnades—finely enough placed in themselves—lose incalculably in consequence. Yet in the refinement of the Græco-Roman order (taken from the Temple of the Sibyl at Tivoli) and in the flat surface treatment of the masses there are real indications of the new spirit. They are tentative efforts in the direction of progress, and mark a certain advance.

The greater part of Soane's other work in London† —the Westminster Law Courts, the Privy Council and Board of Trade Offices in Whitehall, the State Paper Office at Westminster, &c.—has since been either altered or removed, but, from such illustrations as we have seen, it does not appear to have been more successful.

* A satirical attack upon his "Bœotian" style, published in *Knight's Quarterly Magazine*, 1824, led to an unsuccessful libel action, and he continued to incur much hostile criticism and ridicule.

† In that undertaken subsequent to 1811 he employed Michael Gandy (brother of Gandy-Deering) as his head draughtsman. The latter was a brilliant architect and of invaluable assistance, but as he received no acknowledgment of his abilities, even in the work executed after Soane himself had become blind, he ultimately went insane through disappointment (1843).

Yet, as Professor of Architecture at the Royal Academy, to which position Soane was appointed, in succession to Dance, in 1806, his lectures on architecture attracted widespread attention* and enabled him to exercise real influence in assisting the formation of a school of serious thought in design.† Amongst those directly under his influence, the most notable was Sir Robert Smirke—his pupil and successor—who, though he had studied in Greece and Sicily and was a more accomplished scholar, was yet an artist of far less conviction.

The wide extent of his travels, which included Italy, the South of France, and the German States, had given him a taste for copying rather than for original achievement, and a facile catholicity of appreciation that made it a matter of indifference whether he perpetrated a Gothic anachronism or occupied himself with serious design. In spite of this his contribution to the movement was considerable. His classic work is admirably refined and never spoilt by meretricious detail. If nothing worse were done nowadays we might contemplate



UNIVERSITY COLLEGE, LONDON. WILLIAM WILKINS, ARCHITECT

* The course, which began in 1809, was temporarily suspended in 1810 in consequence of a vote of censure passed on him by the Academy for adversely criticising the work of a contemporary.

† For a criticism of the collection of "antiques, books, and works of art," which he had made (shortly after his appointment as professor) for the benefit of students in his house in Lincoln's Inn Fields, ultimately bequeathed to the nation, *vide* Michaelis, *Ancient Marbles in Great Britain*, § 90, p. 164.

the future with a very reasonable optimism. Before his extensive tour in Greece in 1803* he had already made himself familiar with the publications of Stuart, Chandler, Le Roy, and others, and his researches in the Peloponnesus, Attica, and Sicily confirmed his admiration for Hellenic art.

Shortly after his return in 1805 influential friends were able to secure for him several important commissions. Of these Lowther, Eastnor, and Kinfauns Castles were executed in his mediæval manner, "utilised and modified for the purpose of convenient occupation by noblemen of the nineteenth century." Inability to discriminate between relevant and irrelevant sources of inspiration led Smirke into these unhappy mistakes, as it did most of his contemporaries. They found it a matter for self-congratulation† that they were possessed of sufficient knowledge and technical versatility to design in either Classic or Gothic, and complacently regarded their burlesques of mediæval architecture as convincing proofs of superiority over their predecessors. They conceived themselves advancing by leaps and bounds. They did not appreciate that mediæval society is as remote from modern as the latter is akin to the Classic from which it has developed; that the character of modern civilisation renders the revival of Gothic art, even in the most modified or "progressive" form, an impossibility; that an admiration for its barbaric beauty does not justify an imitation that must inevitably be lifeless; that the particular conditions—economic, social, religious, and political—which it reflects and of which it was the product have so entirely changed that no effort to regain the spirit of the age can be even partially successful; that the whole mental attitude of which Gothic art was the vigorous expression has definitely passed, and that with the Renaissance architecture again became personal and self-conscious. It is precisely this that accounts for the amazing inequality of Smirke's performances—his Mediæval are detestable, his Classic always at least pleasant. On the death of Wyatt in 1813, and the subsequent subdivision of the office of architect to the Board of Works, he became one of the attached architects, and undertook the design of a considerable number of Courts of Justice, Council Houses, and the like, in addition to his private work.



THE NATIONAL GALLERY. WILLIAM WILKINS, ARCHITECT.

In 1823 came his supreme opportunity—the British Museum. The money at his disposal exceeded a million sterling, and he was permitted ample time for the elaboration of his design: he was assisted also by the exceedingly simple character of the site. It was an ideal problem, his solution a rather magnificent failure. It is not a coherent whole. There is no unity of conception in the relation of plan and elevation. The

* The overtures which Lord Elgin had made in 1800 with a view to securing Smirke's services in the prosecution of his Athenian researches were ineffectual, though the reason of their failure is not given in the latter's journal ("Memoir of the late Sir R. Smirke," by Edward Smirke: TRANSACTIONS R.I.B.A., 1866-67, p. 197).

† Smirke was wont to recall with pride that he was already practising in Gothic at a time when most of his colleagues had been "but scantily educated in it" (*Ibid.*).



THE MARBLE ARCH. JOHN NASH, ARCHITECT.

great porticoes form simply a frontispiece that is applied to a structure partly independent of it. Yet they have a grandeur that is not entirely the result of mere size. If they reveal his limitation and insincerity as an artist, they reveal also a realisation of the light and shade value of such an arrangement, a quality of imagination in no sense mean, a genuine feeling for greatness of scale.

As the Bank of England may be taken as typical of the character of Soane's achievement in architecture, so the British Museum may be regarded as an embodiment of the best and worst in Smirke's art. And his other important work—the General Post Office and King's College, London (1831)—is of much the same quality—quiet, scholarly, and dignified, but cold in its correctness and remote in its effect.



THE SCREEN, HYDE PARK CORNER. DECIMUS BURTON, ARCHITECT.

The degree in which Soane and Smirke differed from the rest of their contemporaries was, for the most part, in opportunity. Wilkins and Nash alone approached them in this respect.

The former's reputation at Cambridge as an architect of exceptional scholarship* early provided him with an occasion for the exercise of his abilities on a large scale. He had entered Caius College as a scholar in 1796, graduated B.A. and sixth wrangler in 1800, and in the following year, being one of West's "Travelling Bachelors," started on a tour of four years in Greece, Asia Minor, and Italy. The publication of his researches in Magna Græcia† brought the influence of this hitherto unknown phase of Hellenic art to bear on the development of the Revival, and earned for him considerable celebrity.

In 1804 he was requested to prepare a Greek design for Downing College, Cambridge, portions of which, costing over £50,000, he carried out between 1807 and 1811. At the same time he produced and executed a singularly ugly Gothic design for New Court, Trinity—"an example of robust openmindedness not often equalled."‡ This display of cheap versatility further increased his prestige, and commissions followed in rapid succession. His reconstruction of Grange House Hampshire, in 1820, might be regarded as a very successful piece of work had the building been required for the purposes of a temple, but as a residence for an English gentleman it is merely an illustration of the extraordinary submissive character of his client. On the completion of the United Universities' Club House in Pall Mall, designed in conjunction with Gandy-Deering, he undertook the erection of London University College, his *chef-d'œuvre*. The decastyle portico is in itself exceptionally beautiful, and great breadth is given by the faultless pitch of the pediment; but the whole composition seems to have been thought out in elevation and piecemeal. The dome, in consideration of the distance which it is set back from the main front, is too low to dominate the central

* He was the first commentator on Vitruvius to suggest the correct interpretation of the vexed passage in book v., which treats of "scamilli impares." Though wrong in the details of his explanation, Wilkins' contention that they were a device for correcting optical illusions, and the means adopted to secure the required curvature, was subsequently confirmed by the investigations of Pennethorne and Penrose.

† *Antiquities of Magna Græcia*, William Wilkins, Cambridge, 1807, fol. 2. Also *Atheniensia, or Remarks on the Buildings of Athens*, 1812, 8vo; and *Prolusiones Architectonicæ*, 1827 and 1837, 4to (ingenious essays on Greek and Roman architecture).

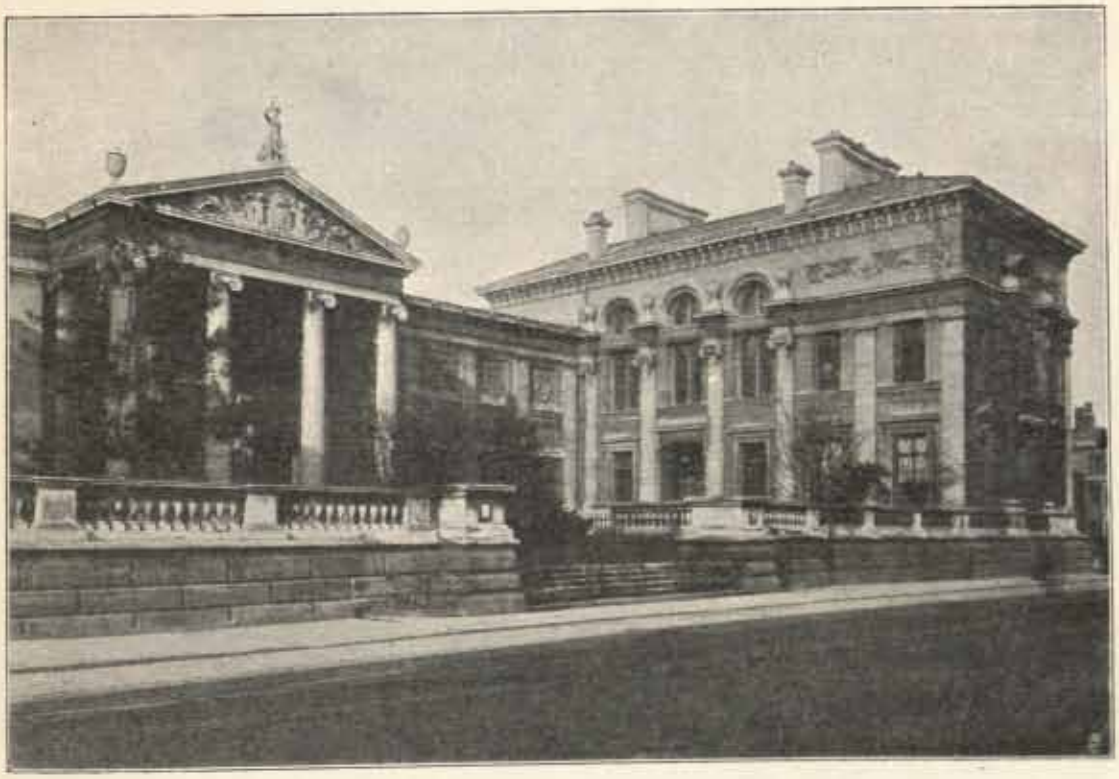
‡ *Architectural Review*, vol. ix. 1901, p. 108, "Art in the Victorian Era," by Arthur Edmund Street.

mass, whilst the latter is altogether out of scale with the wings. It breaks through them with a crude dislocation of lines, and its magnificent podium is conceived quite independently of the rusticated basement into which it dies.

This method of design was the fatal result of archæological knowledge on a certain type of intellect.

Whilst Burton and Cockerell were occupied with problems of massing and composition, of line and proportion, and were simply resorting to Greek models to acquire a more exquisite

Wilkins' own design for the National Gallery in 1832 is convincing evidence of this. Hampered by the unwarrantable interference of the Government, which imposed such conditions as the provision of roadways through the building to give access to the barracks behind,* and by an alteration in the allotted site† and the necessity of introducing the pediment and columns from Carlton House, his original scheme, with its broad flight of steps down to the level of the fountains, and with a group of Venetian horses as the crowning feature, degenerated into the existing compromise,‡



THE TAYLOR AND RANDOLPH BUILDINGS, OXFORD; SOUTH-WEST VIEW. C. R. COCKERELL, ARCHITECT.

sensibility to beauty of form, men of the Wilkins school were regarding the whole business as an affair of the orders and elaborating systems of practice based on the classification of data obtained from antiquarian research. To the blight of Vitruvius and Palladio was to succeed the petrifying influence of this conception of the new scholarship. Hedged about with definitely ascertained restrictions, the art of architecture was to become at once the most scientific and the dullest thing in the world. It might result in the occasional production of some admirably correct individual feature, but in problems of any magnitude it was utterly inadequate, and conducive to an implicit faith in the infallible virtue of porticoes.

a monument to the inelasticity of his academic art. But he at least, in some measure, endeavoured to preserve intact the elemental dignity of architecture by refusing to admit the corrupt introduction of cheap facing composition masquerading as stone. To John Nash must be attributed the initiation of this depravity which subsequently became so general. His opportunity for exercising serious

* The total cost was limited to £70,000—less than one-half of the sum which Wilkins had stated to be necessary.

† The wings were required to be set back so as not to obstruct the view of St. Martin's Church—a stipulation which Wilkins particularly resented.

‡ This has suffered still further by the later alterations of E. M. Barry.

influence on customary practice regarding material came with his selection, as an architect of wide experience and a pupil of Sir Robert Taylor, to carry through the great architectural schemes undertaken under the Regency. Though he had previously enjoyed the patronage of the nobility and wealthy gentry to some considerable extent, none of the work offered him had been comparable in magnitude to the design of the terraces in Regent's Park —the first portion of his public commission. The palatial façades of these he executed in plaster, and "the age of stucco" was established. Its impermanence and the insincerity of employing it as a substitute were disregarded. Society was charmed. Henceforth it was possible to obtain the most sumptuous results without heavy expenditure.

In 1813 Nash laid out Regent Street and The Quadrant, again resorting to a plaster treatment for the elevations. In spite of their featureless monotony, resulting from the undue prolongation of an obvious arrangement, they have that quality of quiet refinement hardly ever absent from even the most emasculate products of the Revival, and the unbroken sweep of the projecting street colonnades must have been extraordinarily effective.*



ENTRANCE TO EUSTON STATION. THOMAS HARDWICK, ARCHITECT.

Nash seems usually to have been most successful in the main conception of his compositions, as in the massing of the terraces in Regent's Park. He apparently lacked sufficient originality and ingenuity in detail to attain success in the treatment of minor features. His entrance to Buckingham Palace † does not bear examination removed from its original position. As part of a great arrangement, its essential imperfections may have passed comparatively unnoticed, but isolated as it now is they are thrown into unsolved relief and accentuate his limitations.

Soane, Smirke, Wilkins, and Nash may be said to typify, in their individual manners of expression, the general character of the early and middle period of the Revival. It was they who exerted most influence and determined the general trend of development by their practice, rather on account of their larger opportunities than for any great superiority in artistry over the ruck of their contemporaries. Holland, with his Græco-Roman style of composition and profusion of plaster Adamesque detail, is comparable both to Soane and Nash.

Inwood, in his St. Pancras New Church, is as archæological as Wilkins, even in the most academic of his performances, and Hardwick—judged from the point of view of the day—outshines both in versatility.*

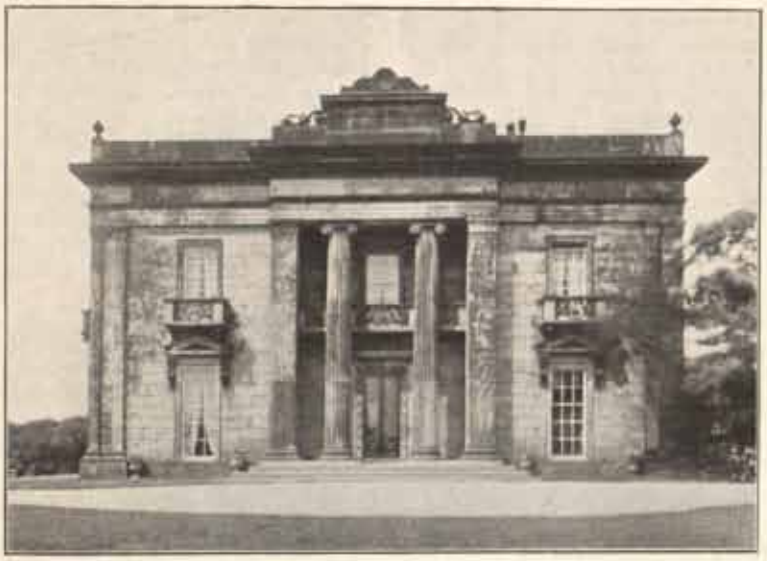
To distinguish the work of Basevi, Railton, Gandy-Deering, and a host of others from that of Smirke or Wilkins, in the absence of certain evidence, would involve the most minutely intimate acquaintance with variations of technique in matters of detail. It is all much in the same spirit—quiet, dignified, and refined, occasionally even magnificent, but usually lacking in vigour and reality. It was the supreme irony of the movement that during its general appreciation it produced little of moment, but that with the decline of public interest its achievements attained to a brilliancy hitherto unprecedented in the history of architecture in England. Whilst the beauty of the Elgin Marbles became as a thing forgotten, and the works of Westmacott, Chantrey, and Flaxman were relegated to the box-rooms of country mansions, the genius of Alfred Stevens was expressing itself, with a Phidian mastery of form, in creations worthy to find a place in the monumental conceptions of Burton, Cockerell, or Elmes.

Decimus Burton had been sane enough to refrain from fettering his powers of expression by the acquisition of too much archæological knowledge. Disregarding fashion, he had resisted the temptation to prepare and publish a treatise on the result of his travels in Greece and Italy. He had carefully preserved intact his own individuality as an artist that he might be able to say what he desired himself, and not echo, with variations more or less successful, the dicta of Palladio or Ictinus.

* These were removed in 1848 at the request of the shopkeepers, and for public reasons.

† As favourite architect of the Prince Regent, Nash was employed to repair and enlarge Buckingham House. Contrary to the intentions of Parliament in voting the money, this resulted in its complete reconstruction as Buckingham Palace (again altered by Edmund Blore on the accession of Queen Victoria). The entrance, which Nash had designed, was removed to Cumberland Gate, Hyde Park, in 1851, and is now generally known as the Marble Arch.

* In 1829, Hardwick designed an Italian hall for the Goldsmiths' Company; in the same year a Tudor Gothic school at Stockport; in 1832 Babraham House, an Elizabethan mansion, for J. Adeane, Esq.; in 1834 the Doric Propylæum and lodges to Euston Station.

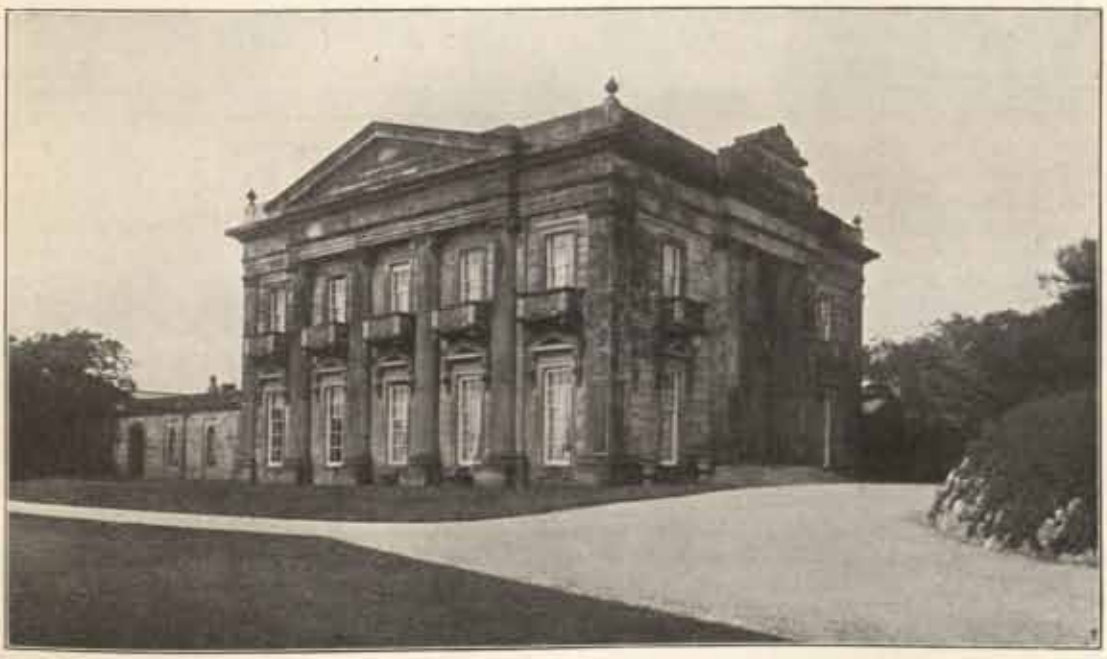


SEAFORTH HALL, SEAFORTH, LIVERPOOL.

Professional connections * served to provide him, at a comparatively early age, with the most enviable opportunities for the expression of his ideas.

In 1825 he was commissioned by the Government to design the architectural features of Hyde Park, and it is in these works that the delicate quality of his genius is most completely revealed. They are distinguished throughout by a refinement and restraint—a certain niceness of handling—too entirely natural and happy to be the forced product of a rigidly scholastic training. If his larger con-

* Born in 1800, he was the tenth son of James Burton, one of the most successful builders of the day, and largely employed in the development of London under the Regency.



SEAFORTH HALL, SEAFORTH, LIVERPOOL. JAMES VALE, ARCHITECT.

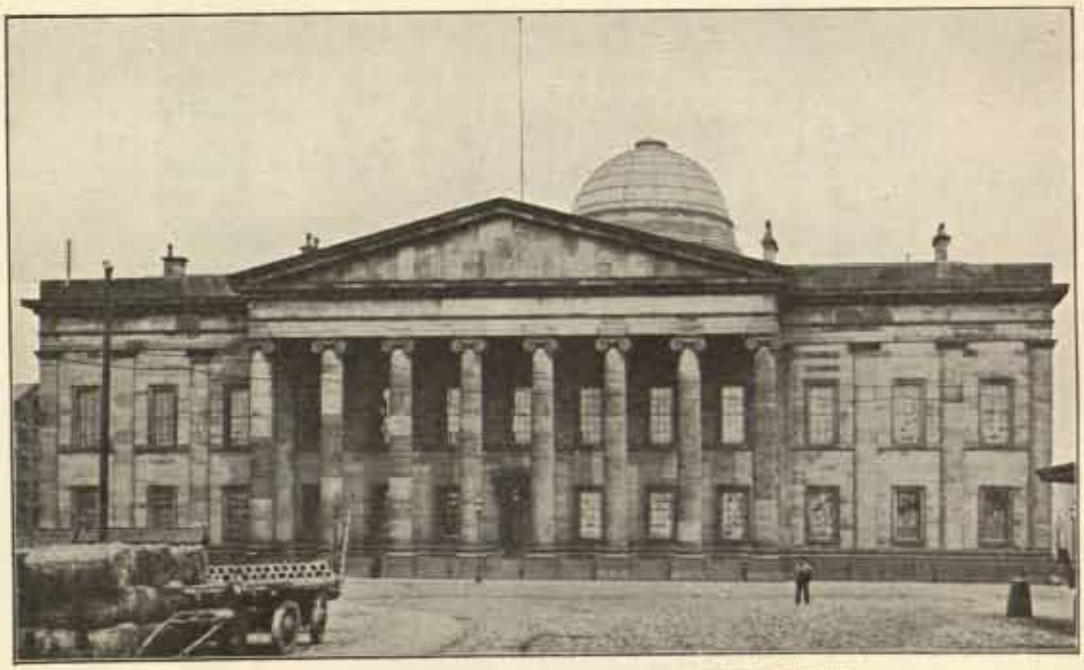
The two views on this page are reproduced by the courtesy of the owner, R. K. Muspratt, Esq., LL.D., Pro-Chancellor of the University of Liverpool.

ceptions lack vigour, they are exquisitely graceful. They possess something of the character which Flaxman gave to his figures.

The Screen, Hyde Park Corner, has a lightness and precision that make the whole composition a model of elegance, Athenian in its daintiness and irresistibly charming. There seems to be a peculiar appropriateness in most of Burton's designs. The Doric lodges to the park are conceived with a sensible appreciation of their surroundings, particularly the North Lodge, Stanhope Gate, which bears a certain resemblance in its general Tuscan atmosphere to Schinkel's delightful villas at Sanssouci.

It was during the execution of these works that, in 1827, Burton designed the Athenæum Club. Regarded from the point of view of modern requirements the provision is inadequate,* and even inconvenient, though at the time of its erection it not only satisfied current demands but so far exceeded them as to serve as the model for much subsequent club design.† But in the treatment of the façades Burton has attained a permanent distinction that can only gain by force of contrast with present-day design. Their composition is exceedingly simple, consisting only in the careful spacing and proportion of the windows in relation to the wall space. They are not dependent for their expression of purpose upon the adventitious aid of symbolical decoration; though, as Mr. Ronald P. Jones has observed, the Panathenaic frieze beneath the great cornice—which is designed, as in the Italian astylar palaces, with reference to the total height from the ground—the tripods, and the statue of Athene are introduced with admirable discernment, and serve to echo the intention; they produce an impression of cultured distinction and reserved refinement that naturally denotes the building as the resort of savants and connoisseurs. The whole design is unaffectedly modern, conceived in the most fresh and direct spirit, and in itself more than a justification of the Revival. It is not a conventional study in a barren academic tradition, but a living expression of thought in the logical development of architecture.

Prevailing fashion tended more and more to restrict the opportunities for the exercise of Burton's



THE CUSTOM HOUSE, LIVERPOOL, WEST ELEVATION. JOHN FOSTER, ARCHITECT.

* It is to be regretted that within recent years it was thought necessary to provide billiard and smoking rooms: their addition has resulted in the inevitable mutilation of the original design.

† The arrangement adopted in the ground floor consists in the symmetrical disposition of coffee and reception rooms on either side of the hall and staircase which forms the main feature. The hall itself is intentionally somewhat deficient in light. Its deeply coffered arched ceiling, supported by columns whose caps are modelled on those of the "Temple of the Winds," acquires a rather theatrical effectiveness as the approach to the brilliantly lighted grand staircase. On the floor above, a drawing-room runs the entire length of the main front. The remainder of the first floor is occupied by libraries and committee rooms. A small intermediate story obtains light from some of the metope spaces between the brackets supporting the balcony being used as window openings.

serious monumental art. He is credited with the authorship of the Clarence and Cornwall Terraces in Regent's Park, and carried out much domestic work both in London and the provinces.* His breadth of conception is finely witnessed in the laying-out of the town of St. Leonards-on-Sea, which he undertook in 1839. The planning is axial and symmetrical, and the disposition of the public buildings and terraces particularly well managed. It was his misfortune to be frequently obliged to occupy himself with the trivialities of landscape gardening and the futile reproduction of mediæval forms, and in these he was no more successful than his contemporaries. He suffered, too, from having to conceive his ideas in a stucco period inimical to great efforts in execution. However untruthful his work, both externally and internally, may be from the point of view of apparent material, the deceptions were only such as were forced upon him by the conditions of the time. His employment of substitutes, once the practice be admitted, was invariably reticent and inoffensive. The increasing depravity of public taste, which reached its climax in the eagerly accepted Philistinism of Ruskin, ultimately led Burton to retire from a struggle in which he was hopelessly outmatched. His death in 1881 was received with comparative indifference. One or two professional references† were made to his forgotten career, but for the most part society was too busily engaged in admiring romantically picturesque travesties of Gothic art to bother its head about serious achievement in architecture, and his work was dismissed as "Pagan."

He differed widely from both Cockerell and Elmes in that the nature of his genius was not so isolated as theirs. His work has little of the former's audacity in minor composition, and nothing of the latter's Titanic force of massing. Rather it is typical of the cream of the later general phase of the movement—of the occasional masterpieces to be found here and there throughout the country whose authorship is frequently obscure, and of which the most perfect is, in so far as we know, Seaforth Hall,‡ incomparable in the faultlessness of its proportion and the beauty of its detail.

The individual character of Cockerell's architecture is the more remarkable in consideration of the vast extent of his knowledge, and the almost German zeal with which he had laboured as an archæologist. The natural result would have been a conventional *réchauffé* of classic detail. Few artists could have come out from such a series of assiduous investigations and careful reconstructions as he had undertaken between 1810 and 1817 in the company of Linckh, Forster, Haller, and Stackelberg, at Ægina, Bassæ, and elsewhere, without their originality being permanently crippled. The worst such a training did for him was temporarily to impair his faculty of practical application.* For the rest, the benefit to his art was incalculable. In receptiveness he was "a Greek of the Great Period." Schinkel's statement of his own ambition "to build, not as the Greeks built, but as the Greeks would have built had they lived now," might have been uttered by Cockerell himself. His ability to refashion motives and to give them a new significance and additional possibilities is without parallel. The only occasion on which he ever consented to lend his powers to the comparatively idle task of reproduction was in the execution (in collaboration with Playfair) of the Scottish National Monument, Edinburgh. And in that case the excuse was admissible—it was to be a modern rendering of the Parthenon. Yet as mediocrity alone remains at the same fixed level of attainment, so Cockerell's achievement fluctuated. In the most important of the work which he undertook shortly after his return—the Bristol Philosophical Institute, the Cambridge University Library,† and the exterior of the London and Westminster Bank in Lothbury ‡—there is the breadth of manner of a master, but in his rejected design for the Royal Exchange, London, an extraordinary falling off is evident. Some of the surface treatment below the subsidiary entablature appears frankly unresolved. The six disturbing figures on the broken main cornice seem to have been introduced merely to supply a *raison d'être* for the free-standing columns, and the corner towers are worse than unfortunate. Even Cockerell's superb draughtsmanship does not obscure the unsatisfactory nature of the whole conception.

Shortly after the production of this incomprehensible failure, in 1839, he won the competition for the Gallery at Oxford, known as the Taylor and Randolph Buildings, by a design of exceptional beauty. In this, again, there are columns serving no other purpose than the support of

* His later work included the laying-out of the estate of Eastbourne, Liverpool, now known as Prince's Park.

† Royal Society: Obituary Notice. Fergusson. *Vide* also *R.I.B.A. Memoirs.*

‡ We have had some difficulty in tracing the origin of this work. It appears to have been erected in the first decade of the 19th century, and was the design of James Vale, partner of Cornelius Sherlock. As their connection resulted in the latter's obtaining the credit for the work, Vale committed suicide.

* Before going out to Greece, in 1810, at the age of twenty-two, he had already worked in his father's office, and in that of Smirke, for some years. His design for the Wellington Palace, produced during his return through Italy, was quite incoherent, the plan having been conceived independently of the elevations.

† Only a fragment of this—the northern side of the quadrangle—has ever been erected.

‡ Tite, with whom Cockerell was working on this occasion, designed the greater part of the interior (*Arch. Review*, vol. xii. No. 71, October 1902, p. 130. *The Life and Works of R. C. Cockerell* by R. P. Cockerell).

detached figures, but they are of such exquisite Ionic grace, and act so admirably as a foil to the solid mass of the building, that objection appears hypercritical. The vertical grouping of the central windows on the wing faces is managed with consummate skill. In such problems of composition Cockerell's resourcefulness invariably discovered an ingenious and quite satisfactory solution. His surface modelling here, as in all his other work, shows a most sensitive appreciation of texture-values, and the balance of the whole design is most carefully preserved, the lions' heads on the attic cornice being apparently introduced to give just the necessary increase in weight along that line. Yet this same concentration upon the most minute affairs of detail led him into the elaboration of such an ineffectual work as the Liverpool and London and Globe Buildings in Dale Street, Liverpool.

The front elevation is finely thought out, whilst that to the Exchange is, in as far as the principal motives are concerned, largely an echo of his Sun Insurance Office in Threadneedle Street, London. Yet his departures from the original are not altogether fortunate, and the single Doric columns, standing each before a recessed staircase and carrying meaningless brackets, are as unjustifiable as Nash's Corinthian columns at the entrance to Buckingham Palace. But in the façade to Exchange Street East there is a general lack of coherence that results in no definite impression on the mind at all, and is simply due to over-attention to individual features. There is more interest than good composition requires,* and technical mannerisms in panelling are accentuated to eccentricity. On this occasion Cockerell's draughtsmanship seems not to have conduced to the expression of real ideas, but rather to the production of paper architecture that is merely clever.

His skill in detail was incomparable, and his power of selection unerring. In the continuation of the interior design of St. George's Hall, which he undertook, on the death of Elmes, in 1849, he had a magnificent opportunity for the exercise of his ability in this direction; and, though the necessarily Roman character of the main hall precluded the achievement of that exquisite refinement with which he himself had most sympathy naturally and by training, he yet obtained an effect of extraordinary splendour without descending to any Augustan vulgarity; the sumptuous magnificence of the bronze doors and the great candelabra does not cloak any actual coarseness of form. He was an eclectic of rare discrimination.

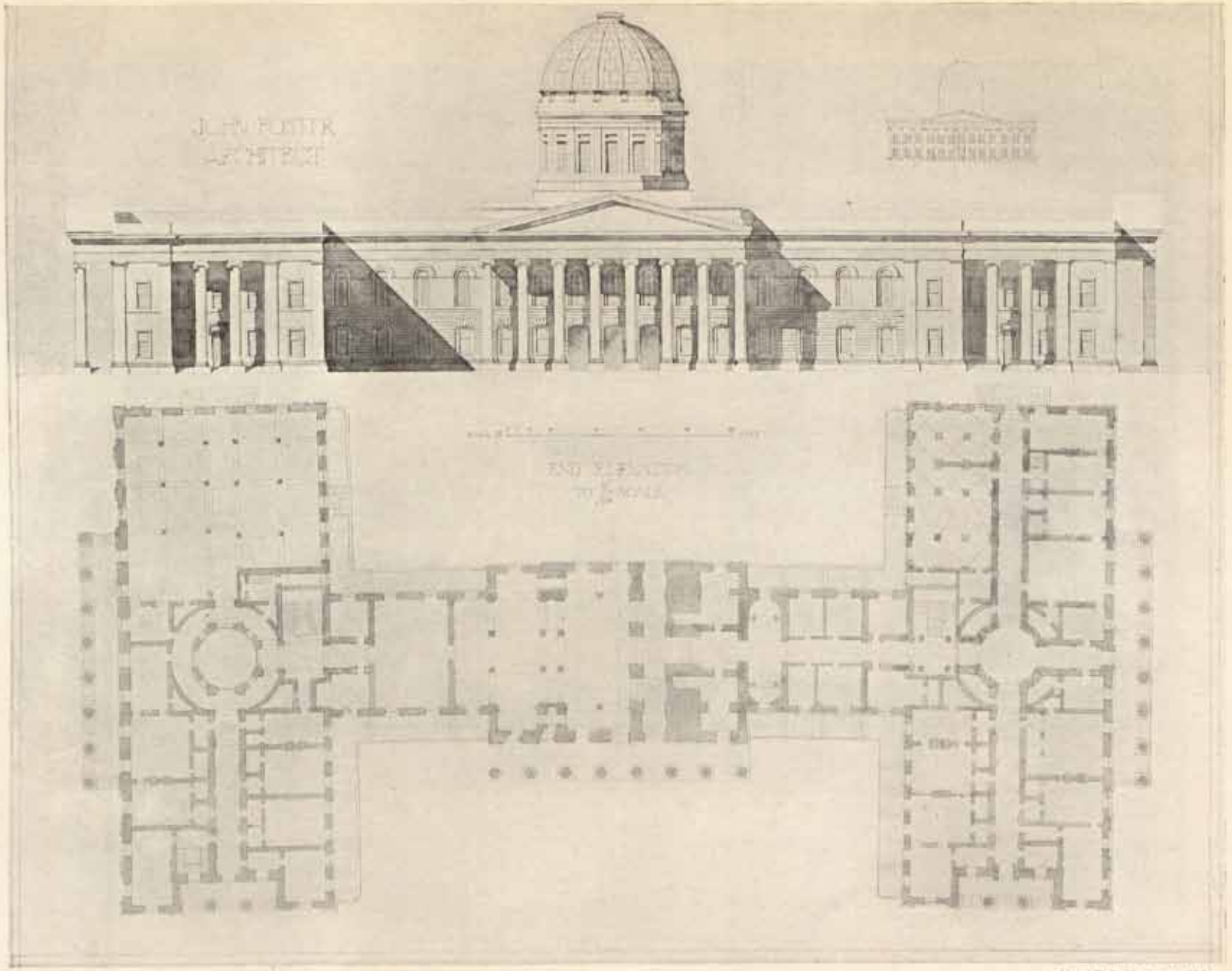
Yet his art was essentially no affair of mere selection or ingenious recourse in detail. His greatest work, the Bank of England, Castle Street, Liverpool, shows a sense of mass, an instinctive capability for modelling architectural form on a large scale only possessed in a greater degree by such masters as Dance, Elmes, Playfair, or Thompson. That he lapsed into Gothic on one or two occasions is undeniable; but that the real sanity of his point of view was unaffected by these slips the whole of the rest of his career clearly proves. He had grasped the fundamental fact that the future development of architecture must inevitably be individual, eclectic, and cosmopolitan. He drew from all relevant sources with a fine judgment. His appreciation of Wren did not lead him into a toleration of the coarse sprawling plaster-swag and mouldings of barbaric profile. The beauty of his own detail was a thing beyond contamination. There is a refined graciousness about even his strongest productions that would seem to indicate that he did not regard vigour as an excuse for crudity. In the manner of his expression he is distinct both from his predecessors and from those who followed him. Yet his work is no more remote from real development than that of such moderns as Stanford White or Cass Gilbert. Perhaps Le Duc most nearly approximates to him. His influence on Elmes can have at most extended only to suggestion as to detail.* For in Elmes originality of thought surpassed all other qualities. Whilst Cockerell displayed an amazing facility in the sculpturesque welding of minor motives, Elmes dealt primarily with architecture in the mass. His reputation is based upon one performance, St. George's Hall, Liverpool,† but it is more firmly established than that of any of his more prolific contemporaries. The brief period of his opportunity,‡ the singleness of his achievement, and its transcendent nature, have all combined to give his

* A defect not to be attributed to the work of Foster, Cockerell's companion on many of his archæological travels. Foster's designs are almost uniformly dull—of the sort that served to bring the Revival into disrepute. With the exception of his largest undertaking, the Custom House, Liverpool, in which he has undeniably attained something of the "Grand Manner," there is a poverty of thought, an air of stupid heaviness, about his productions, that makes one inclined to reiterate Berlioz's exclamation on hearing one of Cherubini's later oratorios, "A thousand francs for an idea!"

* In Elmes' selected design for the Assize Courts—which were ultimately incorporated in his later scheme—the bases of the Doric columns are modelled on those of the great temple of Agrigentum, which Cockerell had investigated many years before (*The Architectural Review*, June 1904, vol. xv. No. 91: "The Life and Work of Harvey Lonsdale Elmes."—R. P. J.).

† The few private houses he executed in the neighbourhood of Liverpool are distinguished by the careful grouping of the windows and the refinement of the detail.

‡ He was born in 1814 and, after some years at school, entered his father's office. In 1839 he entered for the competition for a concert hall in Liverpool, and his design was selected. In 1840 he was again successful in the Liverpool Corporation competition for new assize courts. In 1841 he prepared a design containing both concert halls and assize courts. This was approved and erected under the name of St. George's Hall. On his death (from consumption) in 1847 Cockerell completed the interior "finishings," and the great hall was opened in 1854.



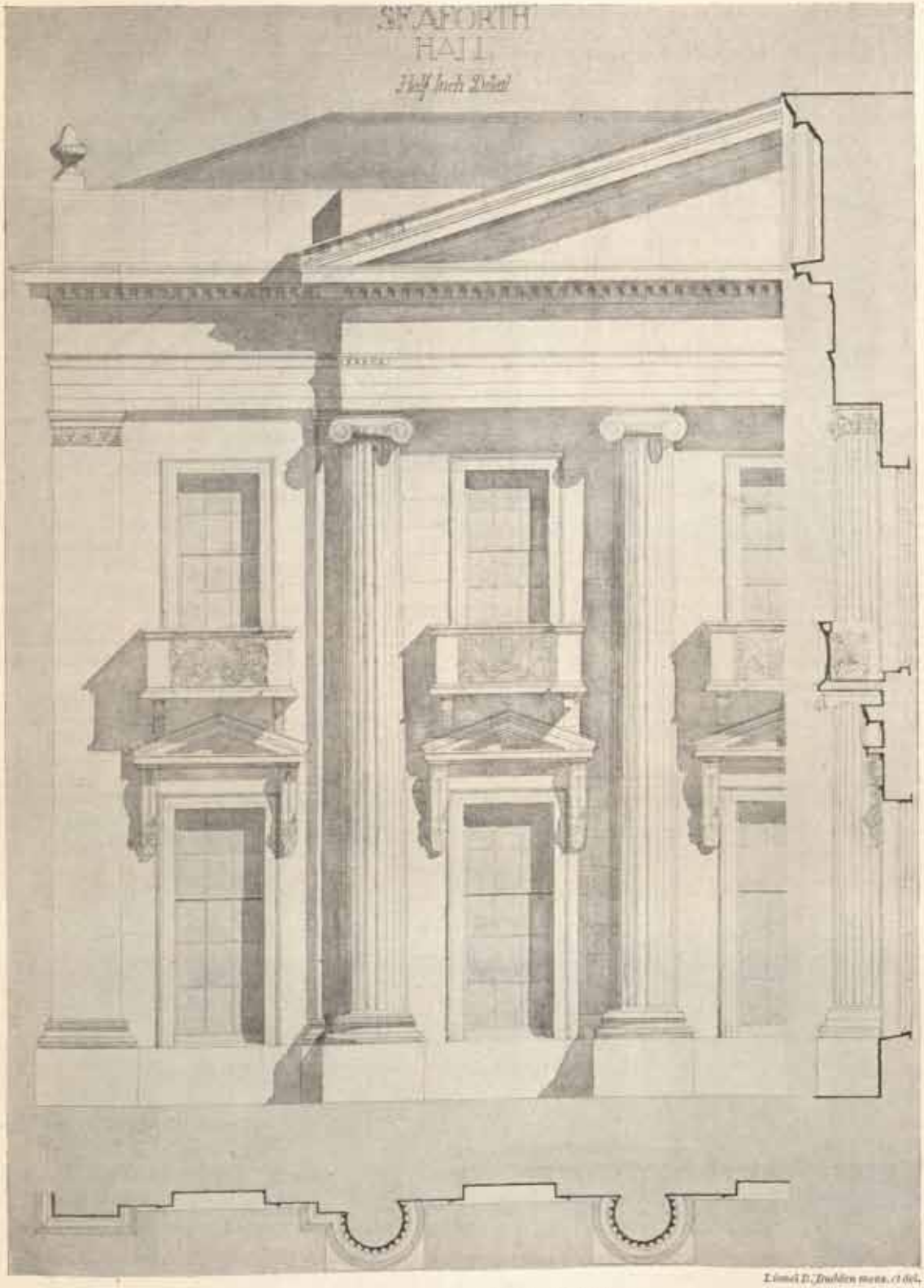
Lionel B. Budden, del.

THE CUSTOM HOUSE, LIVERPOOL. JOHN FOSTER, ARCHITECT.
Reproduced from a measured drawing submitted with the thesis.



Lionel B. Budden mens. et del.

SEAFORTH HALL, SEAFORTH. JAMES VALE, ARCHITECT.
Reproduced from a measured drawing submitted with the thesis.



SEAFORTH HALL, SEAFORTH. JAMES WALE, ARCHITECT.
Reproduced from a measured drawing submitted with the thesis.

career a theatrical brilliance and attractive interest for all time. The significance of his masterpiece may have been temporarily lost amid the strident clamours of those demanding morality in art, but these have passed, or linger on only in country vicarages and municipal art committees, and the work remains.

The disposition of the main blocks embodies the essential quality of unity of conception — the presence of the central hall is indicated by the great attic over the central mass, which gives a definite character to the whole design, "a kind of living attitude and expression." The elements of the composition are simple and few, but they are combined with the instinctive knowledge of genius. Nothing is botched or unresolved or superfluous. No elevation is elaborated at the expense of any other. The west side, with its screen of square columns, flanked on either side by flat windowed masses, and standing on a double basement story, has a sheer cliff-like grandeur that is calculated to make as mighty a blow upon the mind as the great portico with its magnificent podium and sculptured pediment. The grouping of the whole is beyond criticism—it composes from every point of view.

With Elmes architecture was indeed a living art. He was no scholar in a dead or alien language. He anticipated the most modern development, even in the Roman character of his planning. In a sense his conception was at once the crowning glory and the last supreme effort of the Greek Revival—a modern realisation of the Grand Manner.

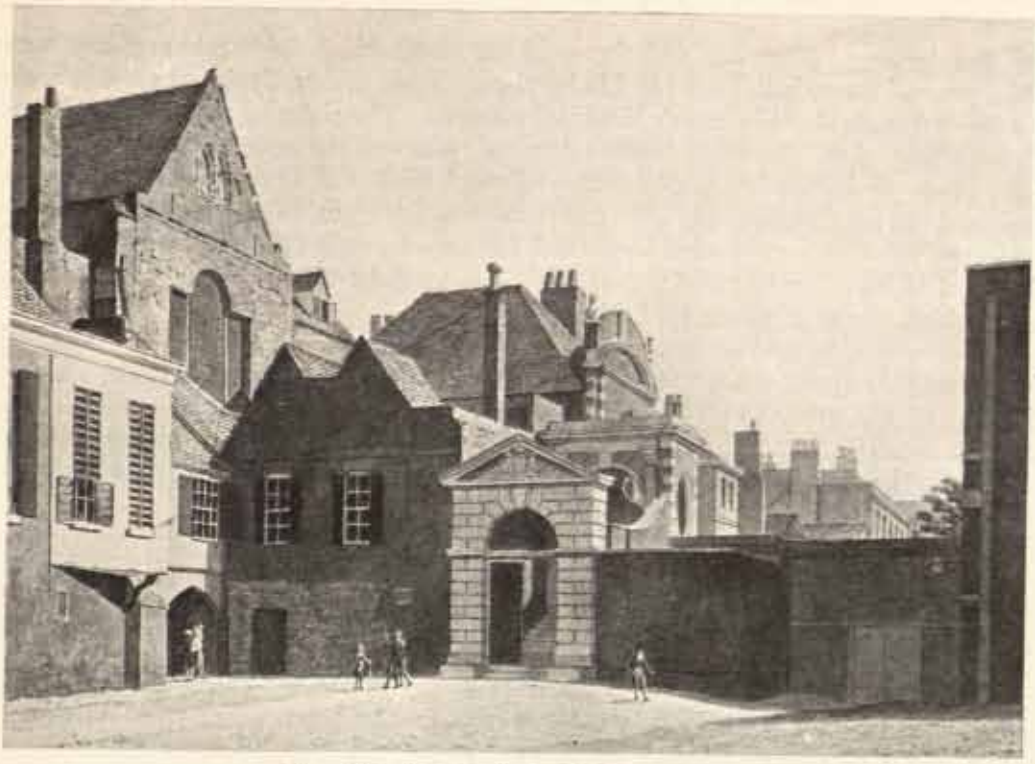
The full value and meaning of the Revival is only now becoming clear again after a period of mediæval archæology in architecture, and the realisation of its significance is the more gradual that we have not yet outgrown the vicious affectations of immature phases of Renaissance architecture which immediately succeeded the collapse of the Gothic movement. The Dutch scroll and the Jacobean columns are still with us, and the suburban practitioner still thinks to ornament the villa porch with strap-work and sporadic panelling of minute dimensions.

But an appreciation of the masters of the Revival is surely dawning. They stood for the recovery of Hellenic sensibility to refinement and beauty of form. They regarded it as an invaluable heritage that had been lost. They were eclectic in the best sense of the word. They did not confine themselves to the reproduction of any particular type which had existed at some previous time, but evolved an architecture in the modern spirit, combining with the flexibility of the Italian and the magnificence of the Roman the refinement of the Greek. They realised that they were not isolated in their civilisation from their classic past, but were indissolubly connected with it, and they perceived that, rightly regarded, we are too far intellectually developed to be content with anything less than a striving after the most perfect forms of expression. Their creed justified itself in the character of their achievement. We of the most modern school can have no greater ambition than to excel their attainments.

Note.—I regret that a Paper in the *Architectural Association Notes* (Vol. xii., 1897) on "The Greek Revival in England," by Mr. Alexander Wood, F.S.A., escaped my attention till too late to take advantage of it.—L. B. B.



THE GENERAL POST OFFICE, LONDON. SIR ROBERT SMIRKE, ARCHITECT.



From a Water-Colour Drawing by T. R. Underwood, 1792.

ASHBURNHAM HOUSE AND THE PRECINCTS OF WESTMINSTER ABBEY.

By Harry Sirr [*F.*], R.I.B.A. Essay Medallist 1883.

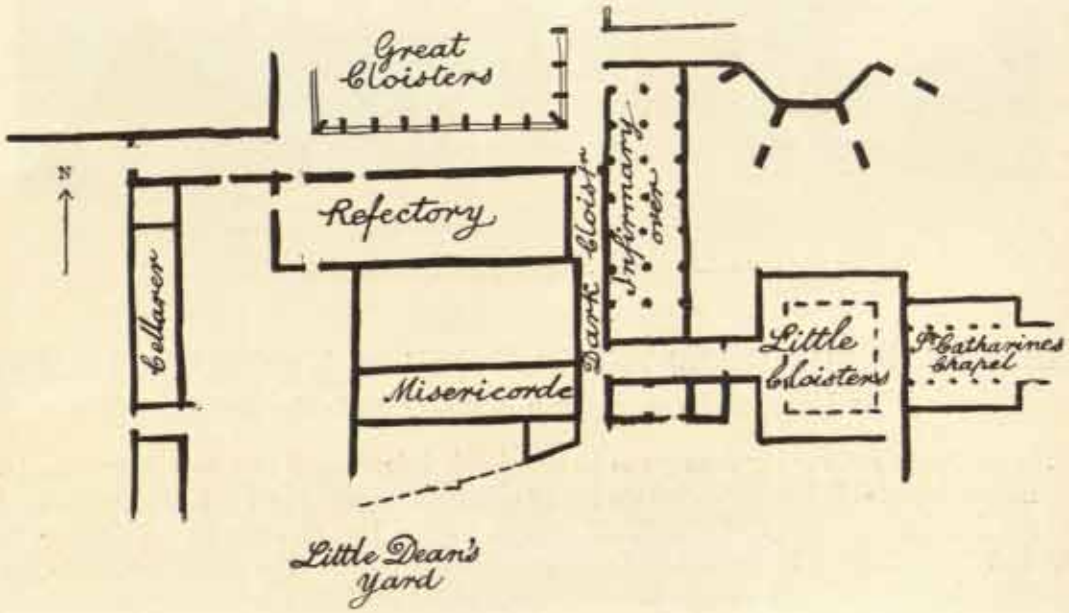
IN case the title of my Paper may not be sufficiently informing, it may be well to state that I have attempted in a measure for the later buildings something of the kind concerning the mediæval work presented in Scott's *Gleanings*. Aided by such authorities as Keepe, Widmore, and Dart, the public records, and the conclusions of more than one investigator, Scott published his book with separate notices of mediæval remains that are incorporated in later buildings. Chiefly, however, it concerns the Abbey itself—in truth the building of transcendent importance. Here, by reason of interesting associations, general plan, and work enriching it within, the dominating building is Ashburnham House, unique amongst those of the period handed down to the close of the nineteenth century. Homely but stately, and secluded from intrusion on the north of Little Dean's Yard, it was a residence for the surroundings more to be coveted than many important houses in the precincts of our English cathedrals.

The site was formerly occupied by the Refectory and Misericorde of the Abbey. The west end and the greater part of the north and south, or side, walls of the Misericorde were altered and form the lower part of the house; the north wall runs through the centre; the south wall is cased to form the south front. The site of the garden behind the house is separated from the Great Cloisters by the Refectory north wall. The passage way called the Dark Cloister, connecting Little Dean's Yard with the Great Cloisters, runs through the old Misericorde, which extended as far as the Infirmary of the monks, afterwards assigned as a schoolroom for the College, when the garden of the Infirmary became the College garden.

The premises on the north side of Little Dean's Yard were taken over by Westminster School

about twenty-seven years ago, and the residence eastward of Ashburnham House was soon pulled down and a new building erected in its place. From the standpoint of artist or antiquary the north-east angle of Little Dean's Yard is the poorer. The picturesque group of old roofs and dormers, a part of the elevation overhanging the yard, and the archway entrance to the Dark Cloister made an interesting corner. The adjacent wing of Ashburnham House had its own hipped roof, but the elevation was united to the overhanging projection, which was supported by an old wood bracket carved with scrolls and foliage. In earlier times the buildings were connected, and an intimacy survived; part of the superseded residence overlapped the mediæval remains which served as cellars for Ashburnham House.

The alterations to Ashburnham House were carried out rather slowly. It was already in the builder's hands in April 1882. Two external features, the porch and summerhouse, which added distinction to the plan, had not then been disturbed, nor had radical changes been made. Somewhat of a vista was possible from the porch across the forecourt through the house to the steps of a terraced garden. The summerhouse stood opposite the steps against the north wall



of the Refectory, as shown on measured drawing No. 1. On the axial line, which was at a right angle with this wall, the extreme distance measured 143 feet.

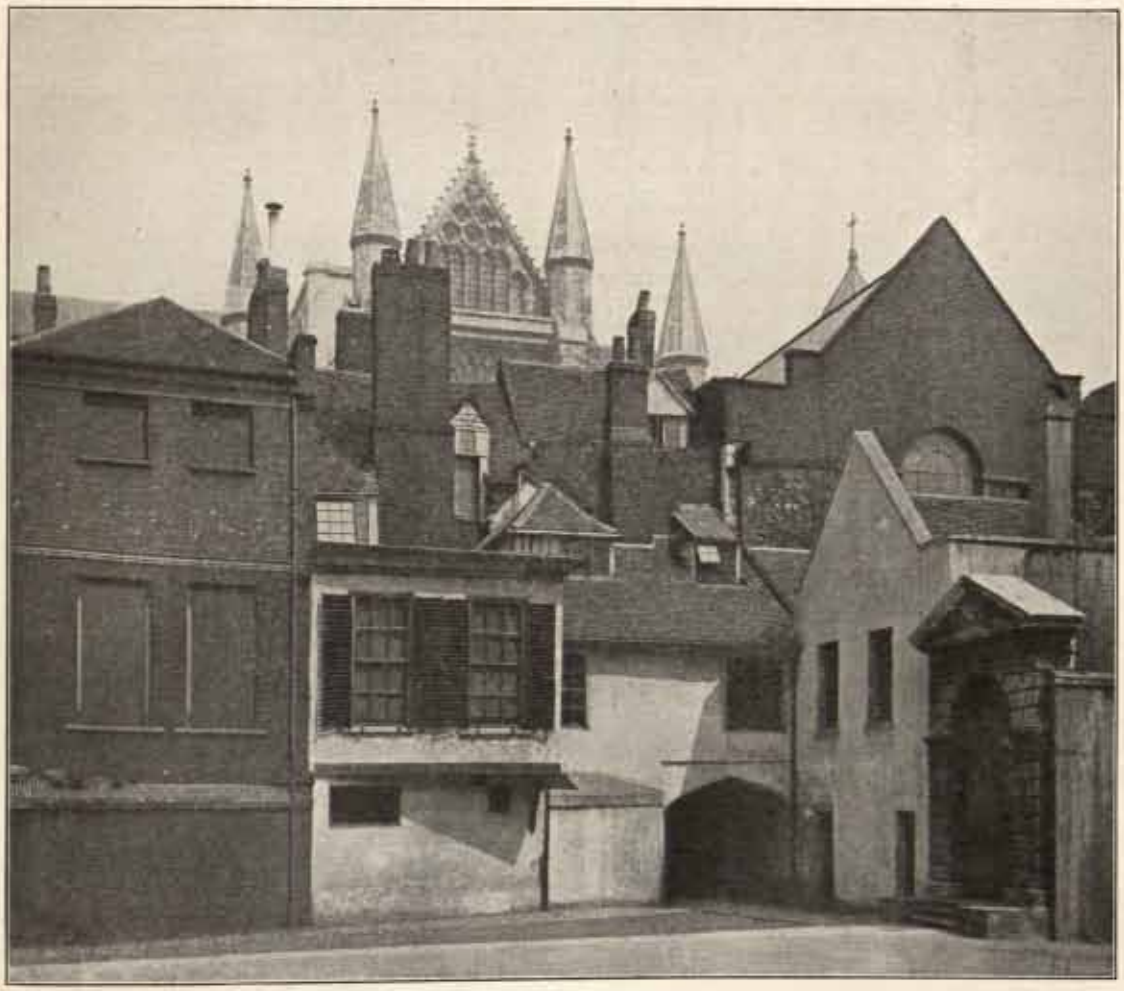
Next Little Dean's Yard the boundary wall had been pulled down, but within the site, and parallel with the house, wing walls on either side of the porch had been left standing, each with a window to the forecourt. These walls had helped to enclose roofed chambers against the boundary which it may be concluded served for the porter's use. The porch was prominent, but the roofs of the porter's lodging had been hidden by the boundary wall.* Two oval rings of bricks probably denoted the position of former window openings, one on the right and one on the left hand of the porch.

At the west end of the front a one-story erection had recently been taken down. Between the east wing and this projection had been an open court, 38 feet 6 inches by 20 feet 8 inches, paved with two kinds of wrought stone in simple geometrical pattern, bordered with flower beds next the

* Shown on Smith's plate of 1808 in Appendix to *Antiquities of Westminster*, J. T. Smith, 1807; and in a photograph taken in 1882 for the Society for Photographing Relics of Old London.

forefront below the windows on either side of the entrance doorway. The paving remains in an impaired state. Old wrought-iron casements, with ornamental fastenings and leaded glass, were in the windows.

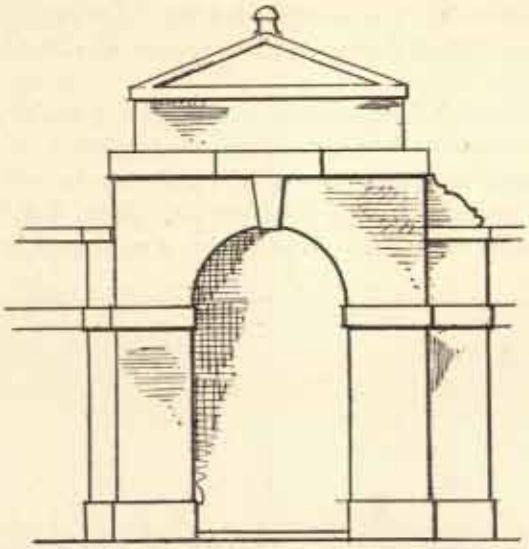
The removal of the porter's lodging may have suggested clearing away the porch, a sturdy and straightforward piece of work, the very appearance suggestive of the days before a regular police. Measurements for the plan were secured with a sketch elevation at the end of one week; by the next Saturday the porch had been taken down. From that time the foreground has remained free of buildings. I believe the porch roof was of stone like the dressings.



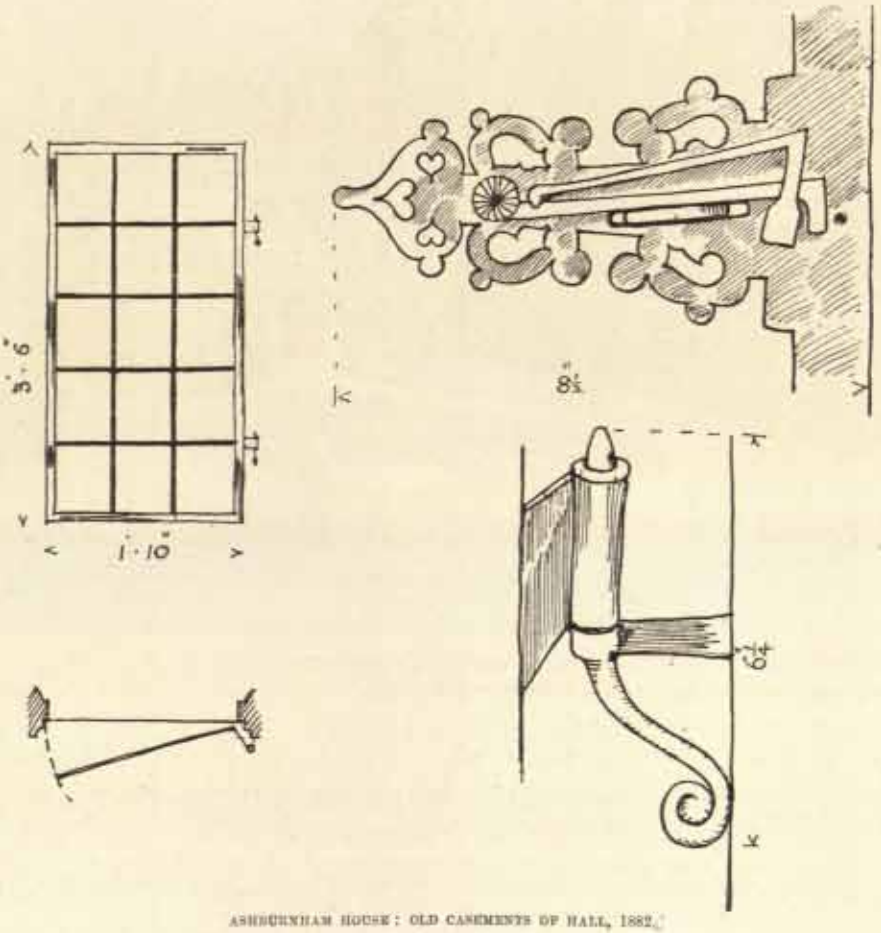
LITTLE DEAN'S YARD, WESTMINSTER.
From *Relics of Old London*, 1882

The drawing made by J. T. Smith a century ago shows the old tiled roofs with dormers, before the red brick front towards Little Dean's Yard was spoilt by the attic story. The external window shutters, which no longer existed when the School took the premises, had been necessary protections from the sun, and helped the homely appearance.*

* There is also a view in *Memorials of Westminster School*, C. W. Radclyffe, 1845. There is, besides, a very careful water-colour drawing, by T. R. Underwood, 1792, in the British Museum copy of Welch's *List of Scholars* 1788 (*Alumni Westmonasterienses*). A reproduction of this drawing is given at the head of this Paper, p. 193.

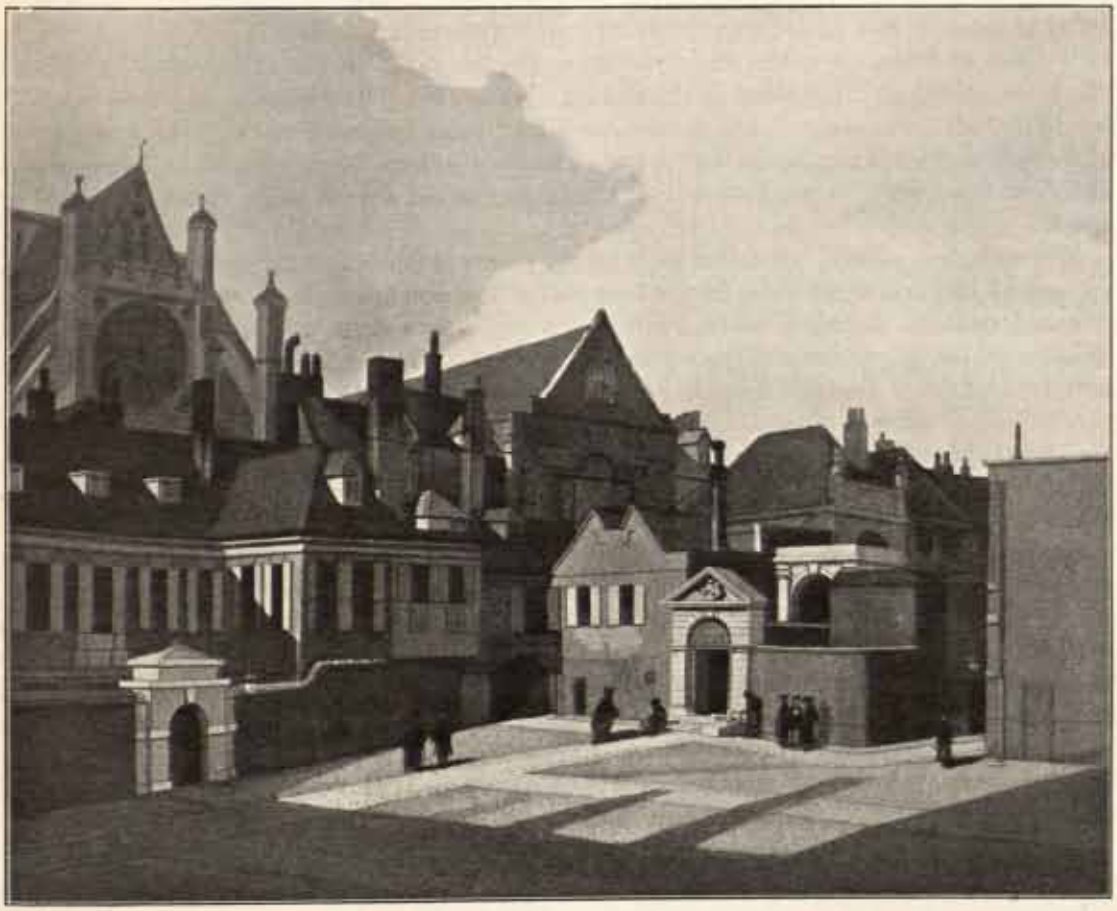


ASHBURNHAM HOUSE: PORCH, 1882.
From a sketch by the author.



ASHBURNHAM HOUSE: OLD CASEMENTS OF HALL, 1882.
From sketches by the author.

The garden front is shown by a measured drawing. The original height was but 27 feet from the level of the courtyard which it faced. Seen from the elevated garden the low proportion must have been very pleasing, the quiet note in keeping with the surroundings.* The facing is of red bricks, and the entablature (fifteen courses in depth), quoins, and central doorway are rubbed and gauged. Probably the windows were all mullioned and glazed in leaded squares, like those which remain on the staircase ; the line of the original high-pitched roof between the peaks of the pavilions can be verified. It is fairly easy, therefore, to imagine the harmonious and dignified appearance of this elevation in the seventeenth century, when it was first set up.



S.W. VIEW OF LITTLE DEAN'S YARD.
From Smith's *Antiquities*, 1807.

The terraced garden elevated some five feet above the courtyard was a happy idea, obviating any feeling of oppression high surrounding walls might beget, while seclusion was still assured. The summerhouse was a pleasant shelter in the sunniest part. I believe the late George Godwin made the suggestion that possibly it was the earliest example of brickwork and stucco in England. Undoubtedly it was an early example, and the little design had been illustrated more than once in architectural works in the eighteenth century.† It is especially mentioned in the notice

* Indeed, it could be judged in 1882, notwithstanding the attic story.

† Ware, *Designs of Inigo Jones and others*; Bretting-ham, *Plans, &c., of Holkham*, 1773; Batty Langley *Ancient Masonry*, 1736.

concerning Inigo Jones in the Architectural Publication Society's *Dictionary*. The structure was substantial; the columns, antæ, and side walls of red brickwork; the entablature mainly of stone with the frieze alone in brick. Triglyphs of wood, the material of their supposed prototypes, were planted on. The coffering within was vaulted in brick; without, the sloped roof was apparently of stone. The growth of ivy had been unrestrained and the slopes were thickly covered. All brickwork had been treated with a thin coat of stucco. This much needed repair, and the stonework of the cornice soffit had suffered from the action of atmosphere and weather. None the less, the preservation of the old summerhouse would not have been a difficult problem. The whole garden was lowered to the courtyard level for workshops and lavatories erected on a considerable portion of the area, and a good view of the front cannot now be obtained.

Written with measurements and notes before me, this slight retrospect concerns the exterior of the house chiefly as it appeared in the middle of June 1882. The interior had then scarcely been disturbed. Successive coats of whitewash and paint had much reduced the sharpness of enrichments and some mouldings, but the work had not suffered from neglect; the ceilings and painted surfaces were in good condition, and there was not a wood panel that had cracked or started.

The staircase, so well known for its intrinsic beauty, is the chief feature within the house. Approached through an archway from a long hall of low proportion, it is not until the platform is reached beneath the windows that a full view comes into sight. Clever planning, sense of spaciousness, the gracefulness of the cupola, and the life of the detail, point to the invention and scholarship of Inigo Jones. There is nothing of the kind which will bear comparison with it, either in this country or abroad.

It was held at the time of which I am speaking that the work was more like that of Gibbs than Inigo Jones, and during the last five-and-twenty years doubts as to authenticity have been frequently expressed. Sir Gilbert Scott is said to have held the opinion that the designs were not from the hand of Inigo Jones, and apparently started the doubts. Possibly some responsibility might be attributed to the inscription on Smith's plate of 1808: "This exhibits a part of Dr. Bell's house, with its Porch, said to be built by Inigo Jones." Even this shows the tradition which can be traced three-quarters of a century earlier had been handed down. The 1743 edition of Ware's *Designs of Inigo Jones*, and the edition undated, which is obviously earlier (possibly 1733), both include drawings of the staircase and summerhouse ascribing the designs to Jones.* Though not his contemporary, Ware lived sufficiently near his times to have received what must have been commonly known and reported. Batty Langley in 1736 bears out the tradition, and suggests from rumours that reached him that some of the work was carried out by Webb.

Ware identifies the designer of every work illustrated, with the exception of the front of the alcove in the dining-room of Ashburnham House. The absence of the designer's name in the engraved table of contents was clearly not an oversight. Ware may have been in doubt, or he may have known positively that the design was not from the hand of Jones. At any rate it seems as if he would not mislead, and the silence is in favour of his general reliability. The front is a pleasing use of the Corinthian order in wood highly enriched, but it obtrudes between one of the doorways and the chimney-breast. The vaulting ribs within the alcove when closely examined seem to have been broken away behind the cornice as though the springing had been at a lower level and some alteration afterwards effected, and yet, apparently regardless of any vaulting whatever, the room is set out with doorways centrally placed on either side of the chimney-breast. Ware's silence and the facts adduced constitute some evidence in support of the view that the alcove front is later than the rest of the work.

* Ware's plan of the staircase is wrong-handed (not reversed in engraving).


Proof Sketch
of Staircase from
Corner of half landing
Ashburnham House Westminster
1882

Admirably connected with the staircase, the ante-room, though the smallest, is the handsomest apartment of the house, set out with attention and architecturally treated, a designed interior of the highest merit. The view shows the doorway from the staircase, and one side of the room is given on a measured drawing.

The cove or great cavetto in plaster is a distinguishing detail in the main order on the staircase in the position of a frieze, It is also introduced effectively in the great drawing-room and in the small lobby adjoining the dining-room. The curves vary, partly owing to the sinking of ceilings, which is obvious on the staircase. I have taken some pains to remeasure these coves, and corrected the measured drawings in two places, giving the normal curves which seem to have been struck from centres.



DOORWAY IN ANTE-ROOM, ASHBURNHAM HOUSE.

The carving in the principal rooms and staircase attracts attention by its freedom and vigour. Some pieces for the eye to rest upon, flowing foliage in high relief, at the head of the staircase on the sides of the ante-room doorway, are especially striking. In contrast the large egg-and-leaf under the great string is chiselled somewhat archaically.

The plaster-work is some of the best of the period. There is that quality about it which distinguishes the wood-carving, recalling the power of Gothic work by reason of its natural force, unconscious virility opposed to coarseness, and capable of much delicacy.

With the exception of the staircase ceiling, all the panels of the ceilings are plain. The borders of the panels in the great drawing-room are elaborately enriched. A band of fruit and flowers in bold relief is carried round the large oval. The flat border of the oblong panels is covered with refined and delicate scrolls of flowing foliage, with tulip-shaped flowers. The room measures 37 feet 6 inches by 21 feet, and would be much improved were the oval panel domed, as shown on one of the drawings prepared for Sir John Soane's Academy lectures. The dome was necessarily removed for the additional story. Evidence of alterations in the timbering was discernible when flooring boards over were taken up in 1882. The attic floor on this side was 6 inches higher than on

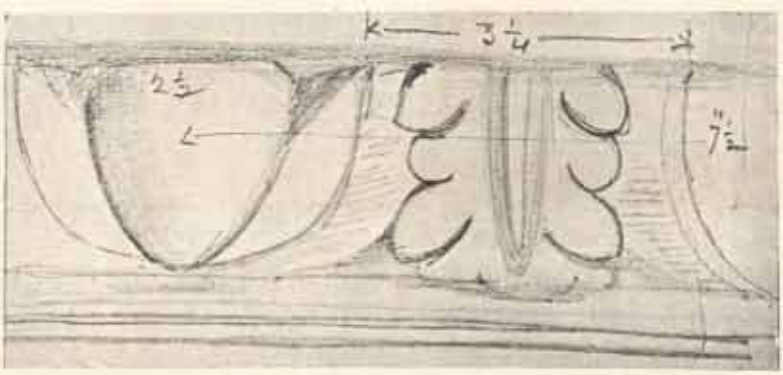
the other side of the house to accommodate the beams of the construction. The door architraves of this room are noticeable for the bold border of laurel leaves rendered with much feeling.

The house was the subject of discussion in the press in 1882 and surprise was expressed that the chimneypieces were unimportant features. The fireplaces are naturally emphasised by the arrangement of panelled wall surfaces, and there is a quiet dignity about them. In the great drawing-room, which is without a projecting chimney-breast, the wall surface above the dado is plain and the chimneypiece is an independently designed feature, but there is no attempt at fanciful prettiness. The original grates doubtless helped the appearance of the fireplaces; evidently they had disappeared many years before the house became part of the School. Since 1882 a shelf and consoles have been added to the hood-mouldings of the chimneypiece in the dining-room lobby at a level which shows they are foreign to the work. In the inner hall a doorway has been blocked and an unsightly fireplace introduced instead. The fireplace is detrimental to the old wood panelling, which has cracked in many places near the fireplace and flue, in the inner hall itself, and on the staircase. The panelled breasts remain intact in the small drawing-room and dining-room. Probably the present guardians of the house know that some of the stoves introduced are very unsatisfactory. These have caused unsightly discoloration and opened panels which mar the appearance of the old work. If twistings of panellings should begin, destruction will be hastened.



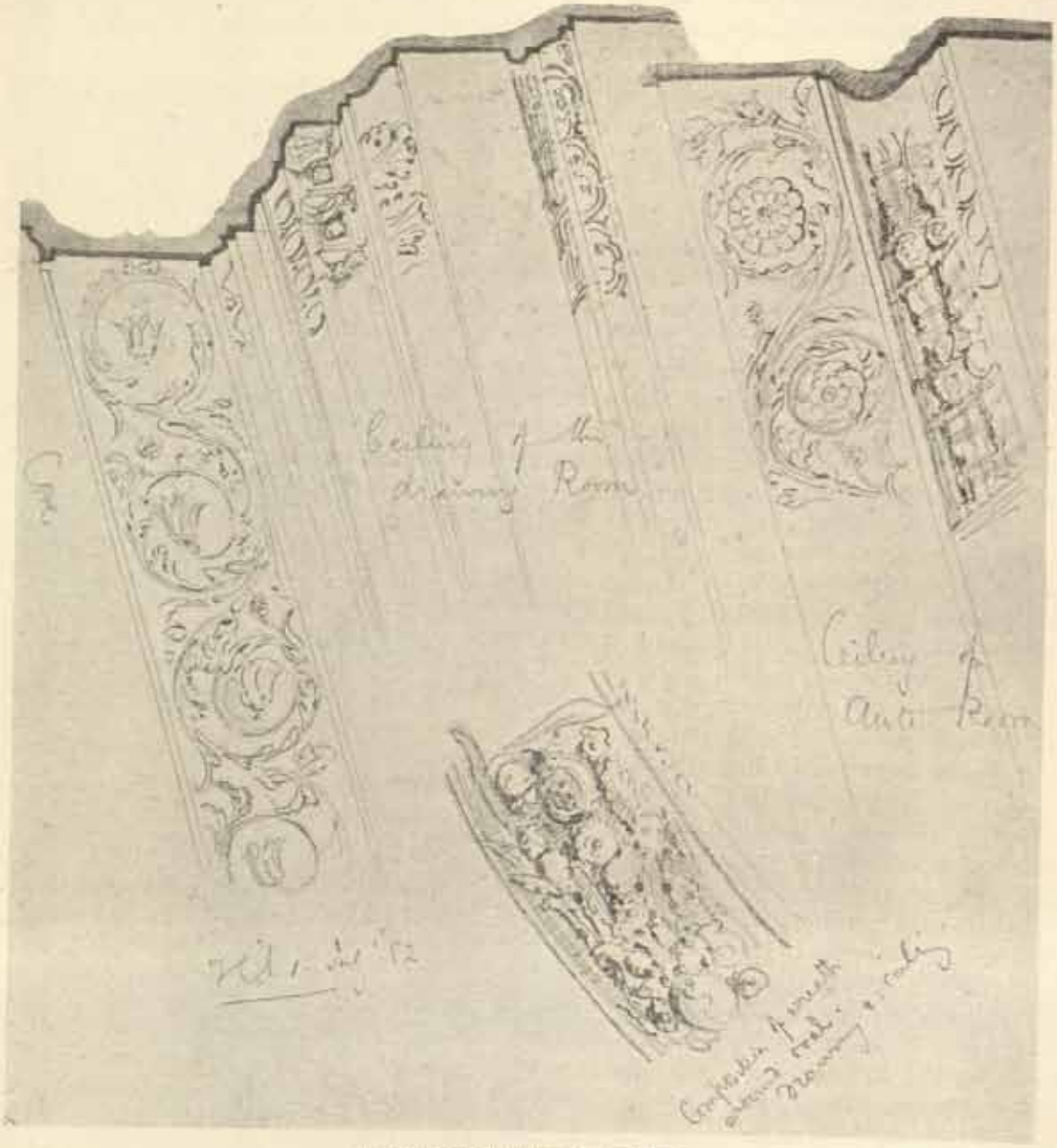
CARVING SIDE OF ANTE-ROOM DOORWAY.
From a sketch by the author.

A simple and very effective chimneypiece of Adams' date remains in the small room on the west side of the ante-room. The interesting little stairway with elm treads which led from this room to the gallery of the main staircase was removed for alterations. The continuous newel and turned balusters were typically English.



EGG-AND-LEAF UNDER GREAT STRING.
From a sketch by the author.

I was under the impression that the entrance hall chimneypiece was of wood, and so noted the measured plan. It was covered with paint. I have since ascertained that the material is stone. With the exception of this chimneypiece and the casements of the hall, no interior features



ASHBURNHAM HOUSE: PLASTER ENRICHMENTS.
From a sketch by the author.

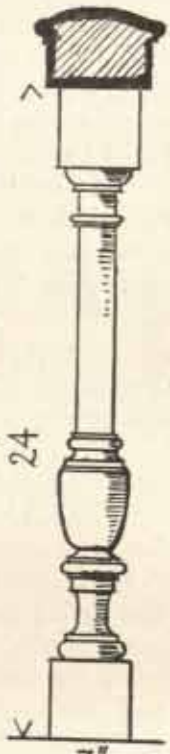
of Jacobean or earlier domestic work were visible. The outside bracket which supported the jutty or overhanging part in Little Dean's Yard was of a character which might be dated back to the reign of James I. or even Elizabeth.

The roof principals of the attic story were interesting specimens of carpentry of the middle part of the nineteenth century, with tie-beams severed at the ends to receive the feet of the

principal rafters and queen-posts or hangers of double boards, as the measured drawing shows.

The planning was naturally influenced by the mediæval work. The ancient walls are chiefly on the ground floor, refaced with brick as the thickness indicates. The offices adjoining the Dark Cloister were a portion which had not been greatly altered; fifteenth-century doors were hanging in one of the openings. Mr. Micklethwaite, from the features to be found of the twelfth, thirteenth, fourteenth, fifteenth and sixteenth centuries, expressed the opinion that the ancient building was as freely altered to suit the varying wants of its users while it remained the Misericorde as it had been since it became a house.

Looking now at the plans of 1882, apparently there were offices on each side of the entrance hall, and the main staircase was used for serving the dining-room. The greater part of the first floor was devoted to reception-rooms. Where then were the sleeping-rooms? Two rooms seemingly available on the first floor, and less than half a dozen attics would not have sufficed. The house had been altered internally on the east side, and the subsidiary staircase from the ground floor was inserted presumably to serve the added top story. The passage way from the great drawing-room preserved a connection with the adjoining premises, originally incorporated with the house, wherein doubtless bed-chambers were located. The former arrangement on the ground floor where the staircase was inserted could not be conjectured. No clue was afforded by the fragmentary paving of stone slabs, 12 in. square, but the jointing suggested that it was the remnant of a designed arrangement. The ground floor was much altered at the end of 1882 after the measured drawings were made.



STAIRCASE TO GALLERY.

The history of the house is fugitive. The present Earl of Ashburnham is unable to amplify facts usually related—viz., that a lease was granted at the Restoration by the Dean and Chapter of Westminster to William Ashburnham the Royalist, a younger brother of John Ashburnham, who was grandfather of the first earl. William Ashburnham died in 1679, having held the office of Cofferer of the King's Household, to which he was appointed after the Restoration. It is generally assumed that the house was built by one of the family.

I am indebted to Dr. Armitage Robinson, the present Dean of Westminster, for particulars of leases which enable me to outline some of the history.

The building must have soon been somewhat transformed at the Dissolution, for it was the residence of Dean Benson during the ten years in which there was a Bishop of Westminster, 1540–50, hence it became known as the Dean's House. The Letters Patent endowing the newly erected see mention the *buildings* and *houses* called the "Frater Misericorde."* Dean Benson never married, and possibly radical alterations for his accommodation were unnecessary. Subsequently, when the Abbey was very much impoverished, individual leaseholders doubtless altered or added to suit varying requirements.

In Queen Elizabeth's time the Dean's House was occupied by Lady Anne Parry,† afterwards by William Norrys, then by Sir John Fortescue, who can be identified as the Chancellor to Queen Elizabeth. James I. did not reappoint him, and just after the accession Fortescue addressed a letter to Lord Cecil from "my poor house at Westminster Abbey," 5th July 1603.‡ Other letters are addressed from his "poor house at Hendon." Compared with the great house

* 20th January, 32 Henry VIII. A.D. 1541. *Vide* Scott's *Gleanings*.

† I think she can be identified as one of the Ladies of the Privy Chamber, widow of Sir Thomas Parry, Comptroller of Elizabeth's household.

‡ Lord Clermont's *History of the Family of Fortescue*.

at Salden, which he built at an outlay of £33,000 in the money of the time, the Dean's House certainly must have been quite small. In 1621 it was occupied by Fortescue's granddaughter, Jane Poultney. Then it went to Sir Edward Powell, 1628, who got a new lease in 1629. Powell can be identified as Master of Requests under Charles I. An order was made for transferring property, including the house at Westminster, to fresh trustees for the wife's benefit, 9th June 1640.* The year 1640 is the conjectured date of the work which we may think was designed by Inigo Jones.† It does not seem likely that extensive work would have been undertaken by trustees.‡ In all probability the house had already been made more stately by Sir Edward Powell before 1640. It may be supposed that any work carried out by him was effected by 3rd January 1633–4, when he wrote from Dean's Yard and presumably was living there.§

What happened during the Commonwealth is not known. Afterwards, when the lease was granted to William Ashburnham, he was already in occupation. Probably he secured the premises at the Restoration. Strong Royalist and adherent of Charles, he could scarcely have resided here during the Commonwealth. The lease, dated 3rd December 1662, was for forty years, with a stipulation that he should make no erection or building such as to annoy the other houses of the Dean and Chapter. Four years and a half later the lease was renewed for a like period to John Ashburnham, of Ashburnham, Sussex.

Of itself the distinguishing name would not imply that the house was built by a member of the Ashburnham family.‖ The yearly rent was about £14.¶ Seventy years later the premises were let for £205 per annum. Difference of money value alone would not account for the larger figures, and it might be conjectured that the house had been much improved. Inigo Jones had died in 1652. If the improvement was the work attributed to him and supervised by Webb it was completed by 1672, the year of Webb's decease. This would place the date between 1662 (December) or 1667 and 1672, which is at variance with the conjectured date (1640) generally acknowledged. Direct evidence alone can determine the precise date. Believing the designs to have been from the hands of Inigo Jones, there is really nothing about the work which would render improbable the earlier dates 1633–40, the later dates 1660–70, or the intervening years.**

The old front paving, I think, affords a clue to the plan in Elizabethan times. It gives the size of an oblong forecourt evidently between two wings. A slight break in the front (denoted on the first-floor plan) which coincides with the paving marks the position of the missing wing. The paving was left, but the wing was pulled down, otherwise in the later work one of the two essential windows of the ante-room would have been impossible and the kitchen light inadequate.

I have made a sketch plan of the main walls of the Misericorde, with forecourt, axial line, and east wing, and have shown the supposed missing wing as it would fit the break in the front wall.†† The plan thus arrived at I conjecture shows in a crude form the Dean's House.

The entire site and the house in outline fifty years after the Restoration is shown to a fairly large scale on "A drawn plan of the Cloisters and Westminster School, with Dean's Yard and parts

* *Calendar State Papers, Domestic*, Charles I.

† Architectural Publication Society's *Dictionary*. Papworth, *Renaissance and Italian in Great Britain* (1883).

‡ In 1645, 18th November, an Ordinance of Parliament was made for ordering, directing and disposing of the rents belonging to the College and Collegiate Church of Westminster, providing the same extend not to the letting leases of any houses or lands for above the space of three years.—*Harleian Miscellany*, vol. ix. p. 545.

§ *Calendar State Papers, Domestic*, Charles I.

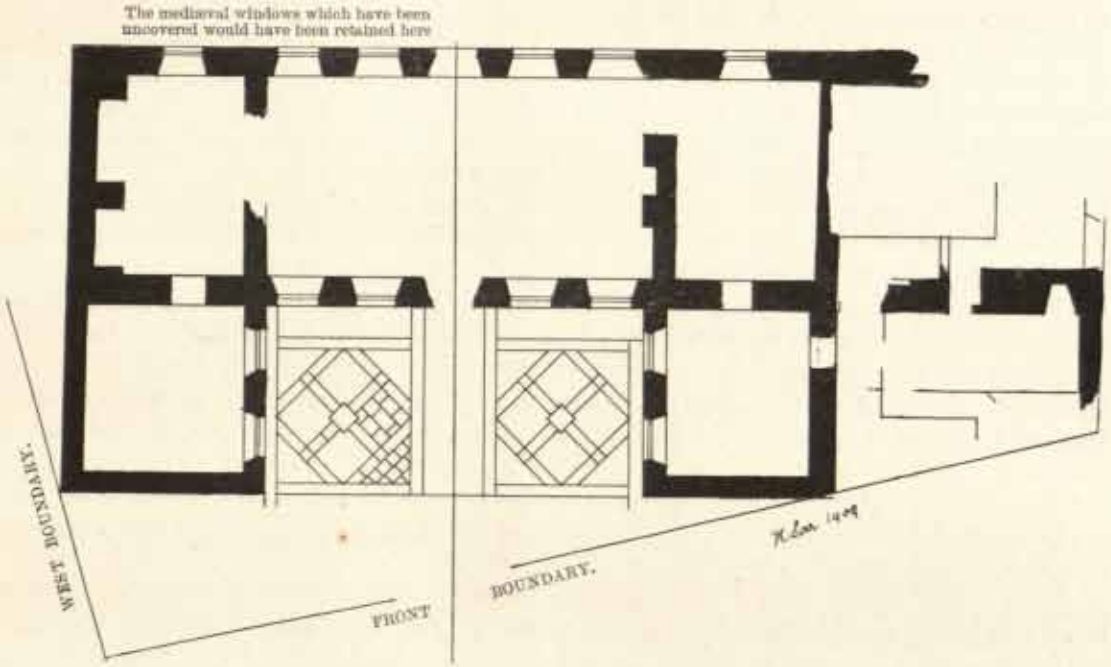
‖ If such were the case, it is remarkable that no records exist amongst the Ashburnham MSS., a very carefully preserved collection and one of the richest in the country. In the leases granted to the Ashburnhams it is still designated the Dean's House. Apparently after the first Earl of Ashburnham (John Ashburnham's grandson) resided here in the reign of Queen Anne, the house became known as Ashburnham House. Mentioned in *Magna Britannia* and Hatton's *New View* in List of Noblemen's Houses—"The Lord Ashburnham's in Little Dean's Yard."

¶ The Dean's house and the adjoining premises were demised by the Dean and Chapter to William Ashburnham for a term of forty years at the several yearly rents of £13. 16*s.* 8*d.*, 3*s.* 4*d.*, and 5*s.* by two indentures dated 14th May 1667.—Russell Barker's *Life of Busby*.

** The Banqueting House, Whitehall, was begun in 1619 (and finished within three years).

†† The missing wing where it hit the west boundary would have controlled the projection of both wings just as much as the existing wing where it meets the front boundary.

adjacent" of the date 1710 * [see copy, p. 207]. The forecourt here agrees with the size of the old paving, though it is plotted off the axial line and consequently not centrally with the entrance and porch. From the map it can be gathered that the Dark Cloister was a passage way under the house, and that a portion of the premises on the other side of the cloister adjoined the School entrance. What appears to be an inset dwelling in the garden, though clearly part of the premises, had a doorway into the Dark Cloister. Possibly this was intended for the accommodation of a secretary. The overhang next Little Dean's Yard is indicated; from its appearance, the supporting bracket which survived until 1882 suggested that this portion dated back to the time of Elizabeth or James I.† The porch and adjacent buildings are also shown. A dotted line appears to represent a screen with a doorway squaring the forecourt on the west side.‡ The garden is terraced with the flight of steps on the axial line just as it remained in 1882. The summerhouse § is not



CONJECTURAL PLAN OF DEAN'S HOUSE.

shown, and the two steps at the Great Cloister doorway would not have sufficed; but the plan of the house was not intended to be in great detail or the internal arrangement would have been indicated.

A report of the Crown Surveyors sent to the Treasury, dated 11th December 1729, led to the house being made a repository for the King's and Cotton Libraries. "We think it our duty to acquaint you," they wrote, "that we have heard of a house in Westminster by its situation much more safe from fire,‖ and more commodious in all other respects, belonging to Lord Ashburnham,

* Crace Collection, B.M. Note in MS. on the map to the effect that it was published by W. Dickenson 1710, engraved by J. Kipp. I have added the words "The Dark Cloister" to the passage which is a continuation of the East Walk of the Great Cloisters, the name by which it is known.

† In any case I think it could not have been later than the Proclamation of 16th August 1661, forbidding the erection of any new buildings in London or Westminster except on former foundations, all such to be built of brick or stone *without jutties* or overhanging windows.—*Calendar State Papers, Domestic.*

‡ This arrangement evidently survived at the date of the large scale ordnance map of 1873, which shows the plan of the house in miniature and division walls in the roofed portion behind the screen. Possibly this was the arrangement up to 1882 until the forefront was opened out to view.

§ The summerhouse is given by Brettingham and Batty Langley as well as by Ware, and was identified as easily as the staircase and dining-room alcove.

‖ Than Essex House.

who is willing to let it to his Majesty, his Lordship paying all duties and outgoings whatsoever, at the rate of £205 per ann: and that the charge of removing the books, making shelves, &c. may come to about the sum of £100."*

An explanation of the greatly increased rent may be offered, though not insisted upon. When Bentley was appointed King's Librarian in 1694 a suite of apartments had been assigned to him in St. James's Palace. His mastership of Trinity College, Cambridge, commenced in 1700, and thenceforth his home was at the College.† It is quite certain, however, that he made use of Ashburnham House, for he was there with his family when the fire occurred in 1731. From the fact that the Treasury were merely yearly tenants, it would appear that the house was but a temporary repository for the libraries. Lord Ashburnham may not have disturbed or dismantled the interior; possibly he let the premises furnished, and the rent may have been fixed accordingly, as the arrangement was made that he should pay all duties and outgoings.

An account of the fire is given in the Report from the Parliamentary Committee appointed in consequence of damage to view the Cottonian Library 9th May 1732. "On Saturday morning, October 23, 1731, about Two o'clock, a great smoke was perceived by Dr. Bentley, and the rest of the family at Ashburnham House, which soon after broke out into a flame: it began from a wooden mantle-tree's taking fire, which lay across a stove chimney, that was under the room where the manuscripts of the Royal and Cottonian Libraries were lodged and was communicated to that room by the wainscot, and by pieces of timber that stood perpendicularly upon each end of the mantel-tree. They were in hopes at first to have put a stop to the fire by throwing water upon the pieces of timber and wainscot where it first broke out, and therefore did not begin to move the books so soon as they otherwise would have done. But the fire prevailing, notwithstanding the means used to extinguish it, Mr. Casley, the Deputy Librarian, took care in the first place to remove the famous Alexandrian manuscript and the books under the head of Augustus in the Cottonian Library, as being esteemed the most valuable amongst the collection. Several entire presses with the books in them were also removed, but the fire increasing still, and the engines sent for not coming so soon as could be wished, and several of the backs of the presses being already on fire, they were obliged to be broken open, and the books, as many as could be, were thrown out of the windows."

The Crown Surveyors also reported to the Treasury, with an estimate of the damage to the house amounting to £574 19*s.* 11*d.* As many books and manuscripts were sadly injured by water, the decorations of the premises likewise must have suffered considerably from attempts to extinguish the fire. It would be reasonable, therefore, to presume that the estimate did not relate to structural work alone.‡

The Treasury authorised, 30th May 1732, the conclusion of an arrangement with Lord Ashburnham by which he was to receive the estimated amount of the damage in money, and from 24th June (1732) free and discharge his Majesty from any further demands in relation to the house, which, in the opinion of the Crown Surveyors, was not unreasonable, "as it was entirely owing to Lord Ashburnham, who did not insist thereon, that a lease was not entered into for a term of years."

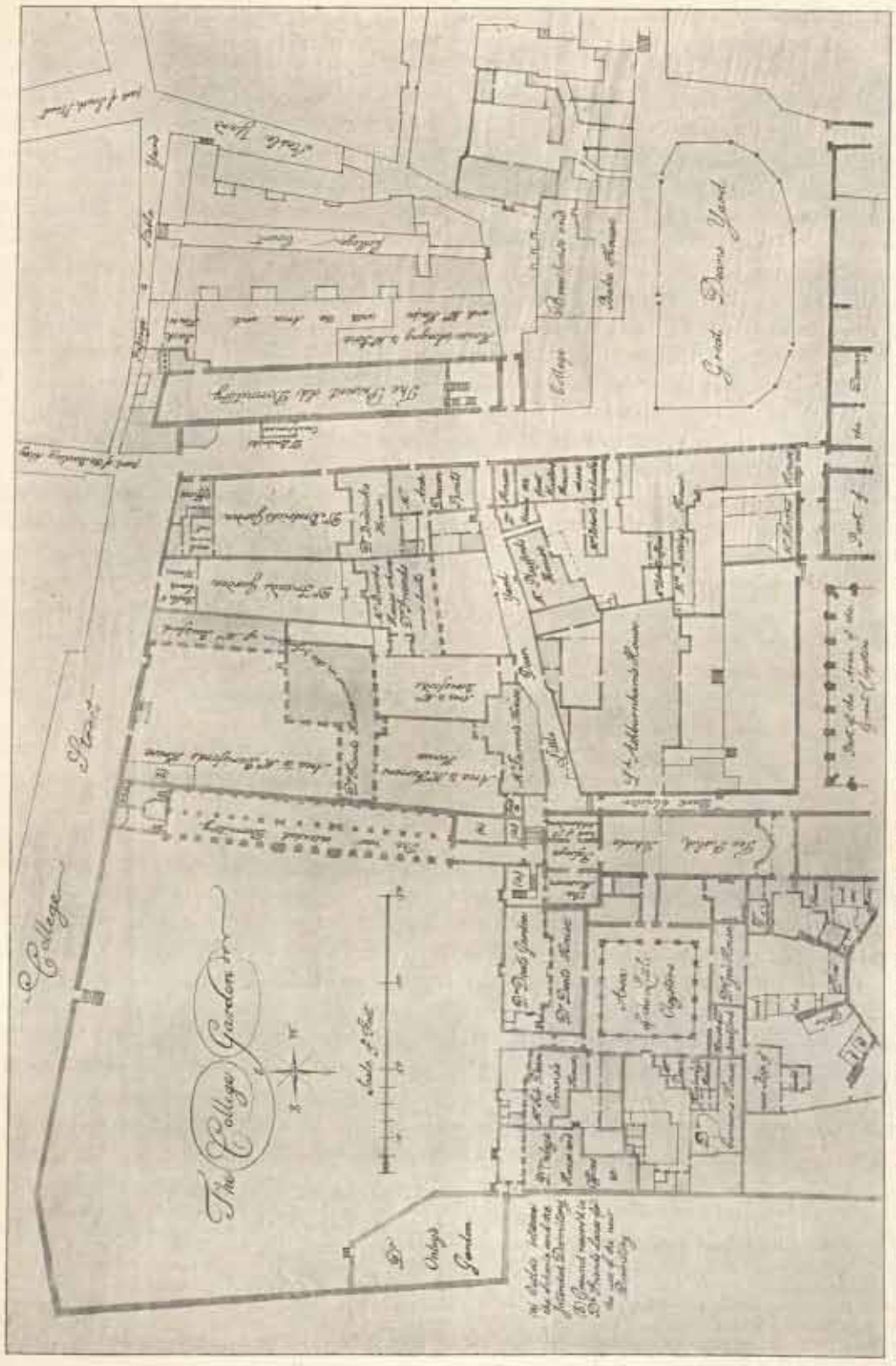
The Parliamentary Committee had related that they viewed the "ruins of Ashburnham House," intending of course to convey that their inspection of the books and manuscripts covered incidental damage. The expression is loose; taken literally it might be supposed to imply that the house had been destroyed.

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* *Treasury Papers.*

† D.N.B.

‡ *Treasury Papers.* The Surveyors who reported in the first instance were the Hon. Richard Arundell, Esq., Surveyor-General (and Surveyor of his Majesty's Roads); Thomas Ripley, Esq. Comptroller; and William Kent, Esq., Master Carpenter. The two former associated with Nich. Du Bois, Esq., Master Mason, reported upon the damage by fire. At this time Nicholas Hawksmoor, Esq., was Secretary, and Mr. Isaac Ware, Clerk to the Board of H.M. Works. (*Books of the Board* in the Public Record Office.)



DRAWN PLAN OF WESTMINSTER SCHOOL WITH DEAN'S YARD AND PARTS ADJACENT OF THE TIME OF QUEEN ANNE (1710) IN BRITISH MUSEUM.
Reduced from a copy by the author.

I am afraid considerable misapprehension has led to erroneous inferences. Frequently it is stated that Lord Ashburnham had sold the house to the Crown, and it is generally held that the greater part was destroyed by the fire.* The Crown had possession two years and a half, and merely rented the premises, as I have already shown. The plan of 1710 clearly shows the extent of the premises before the fire. The house could not have been larger. The garden front remains, the first floor is intact, and the window openings in the forefront prove the impossibility of another wing which might have disappeared. It is never suggested that the work is restored; on the contrary, it is implied that much is lost; but the valuation of the damage hardly bears out the conclusion that the house is but a remnant of former stateliness.†

Dr. Bentley and his family were residing here. Not improbably the libraries were lodged in an apartment near the Dark Cloister and adjoining the somewhat bare room next the small drawing-room. Thus, the fire would have originated near two rooms, which are entirely devoid of interest, eastward of the inner hall. The rooms are *en suite*, part of the planning of the seventeenth century, including the staircase, for which the garden front was designed. It may be concluded that the original finishings have disappeared, and the fire would account for this, and also the bareness of the room on the east of the small drawing-room.



ASHBURNHAM HOUSE: TRUSS UNDER JUTTY.

Ashburnham House was never occupied by a prebendary till after 1740, when the two prebendal houses by St. Margaret's Churchyard and next the north aisle of the nave were pulled down. Dr. Armitage Robinson has kindly furnished me with this information. Dean Stanley relates that the house in 1739 reverted to the Dean and Chapter, and was divided into two prebendal houses.‡

Here, then, is the explanation of the severance of Ashburnham House proper, shown on the measured drawings, from the apartments branching eastward and returning by the side of the School Doorway, which were taken down in 1882. Their elevations, altered from time to time as the old views prove, were interesting to the last, and in former days they were evidently in studied harmony with the main house. I have remarked once or twice upon the old bracket under the jutty. Much covered with paint, the front carving had become indistinguishable, but I thought the bracket some evidence of the date of the superstructure. Yet it is noticeable that a bracket shaped on the back of different outline, fashioned rather in the manner of strapwork, can just be discerned on Underwood's water-colour drawing of 1792. Possibly it became weak and an old bracket from elsewhere was inserted to take its place, for the bracket I sketched certainly was old. The apartments under consideration, when separated from Ashburnham House, constituted one of the residences referred to by Dean Stanley. Mr. Turle, the Abbey organist, was the last occupant. The extent of this dwelling can be discovered by comparing the plan of 1710 with the measured drawing of 1882, but the northernmost apartment on the west of the Dark Cloister was used in connection with

* "The greater part was burnt in 1731, two rooms and a staircase and an alcove in the garden remain."—Architectural Publication Society's *Dictionary*.

Accepting the house as an authentic work which remains one of the most beautiful of his art, the notice of Inigo Jones in the *Dictionary of National Biography* proceeds, "although it was partly destroyed by fire in 1731."

† Mackenzie Walcott states that the Cottonian Library was housed here "in a handsome gallery within the King's Library and adjoining the south cloister of the Abbey." *Memorials of Westminster*, 1849. *Vide* also Scott's *Gleanings* under the "Modern Buildings." There is no sign of a building adjoining the south cloister on the plan of 1710. Apartments abutting on the *Dark Cloister* possibly may have been prepared to accommodate the libraries, with the advantage of an approach independent of the main entrance of Ashburnham House. The Parliamentary Committee refer to "*the room* where the manuscripts of the Royal and Cottonian Libraries were lodged."

‡ *Memorials of Westminster Abbey*.

Ashburnham House. Westminster.

No. I.

Formerly the Residence of The Revd. Canon Lord John Thynne but now connected with Westminster School.

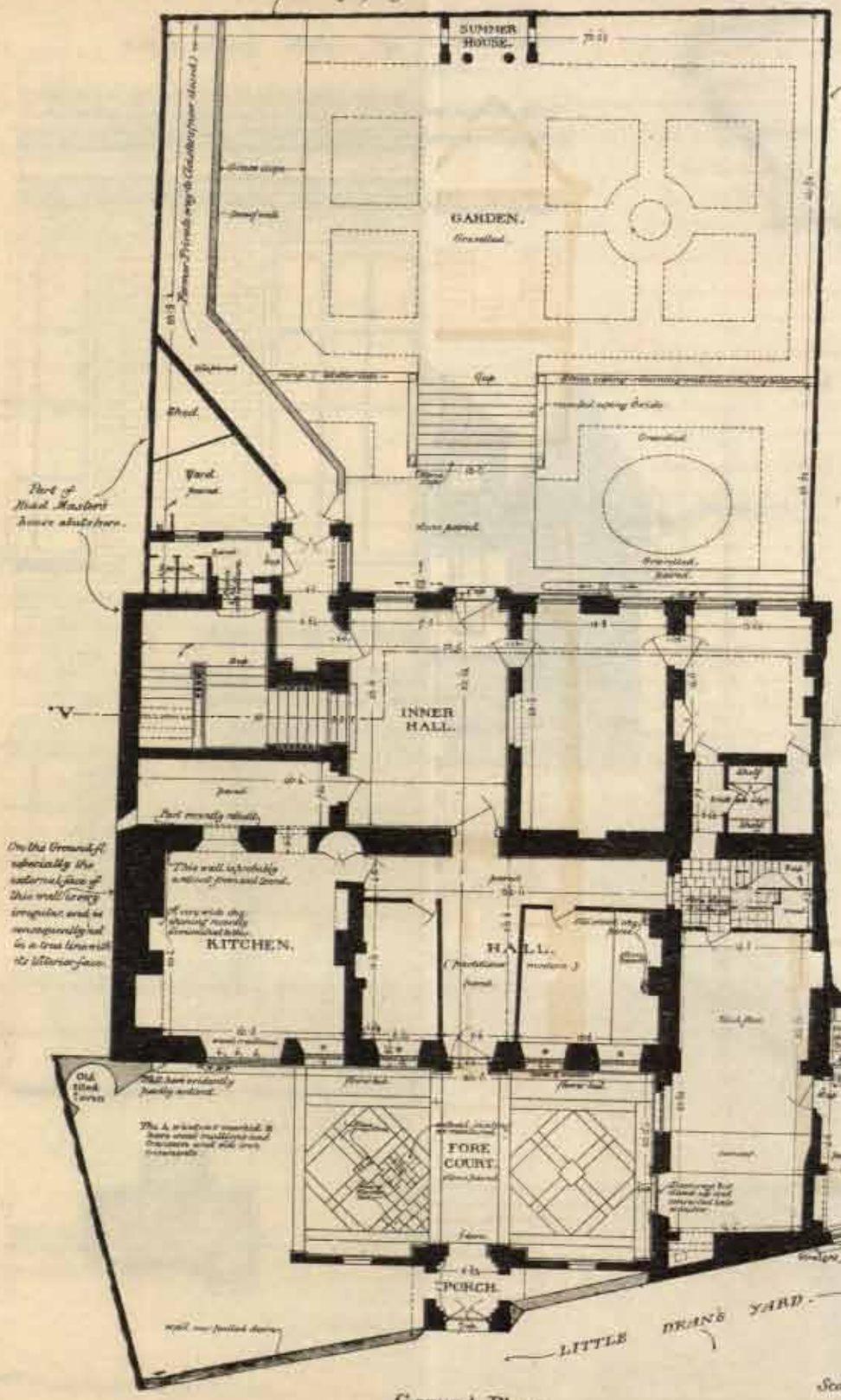
The house is undergoing alterations, but no notice is taken on these plans of any alterations effected since June 1882.

Flower beds dotted in garden on Ground plan.

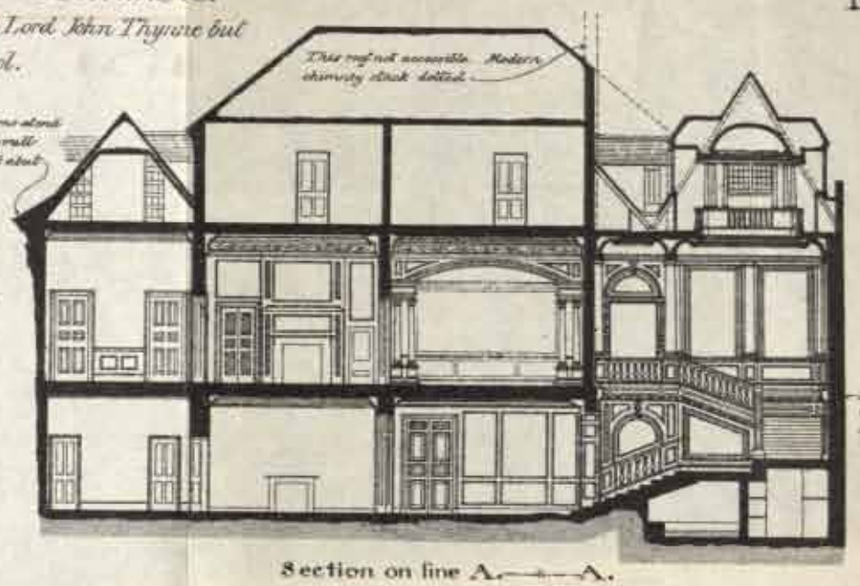
All floors are of wood except where otherwise expressed on plans in writing.

On the plans a single line close to and parallel with internal walls is meant to denote panelling, and a second line is meant to shew where shutterings occur as well.

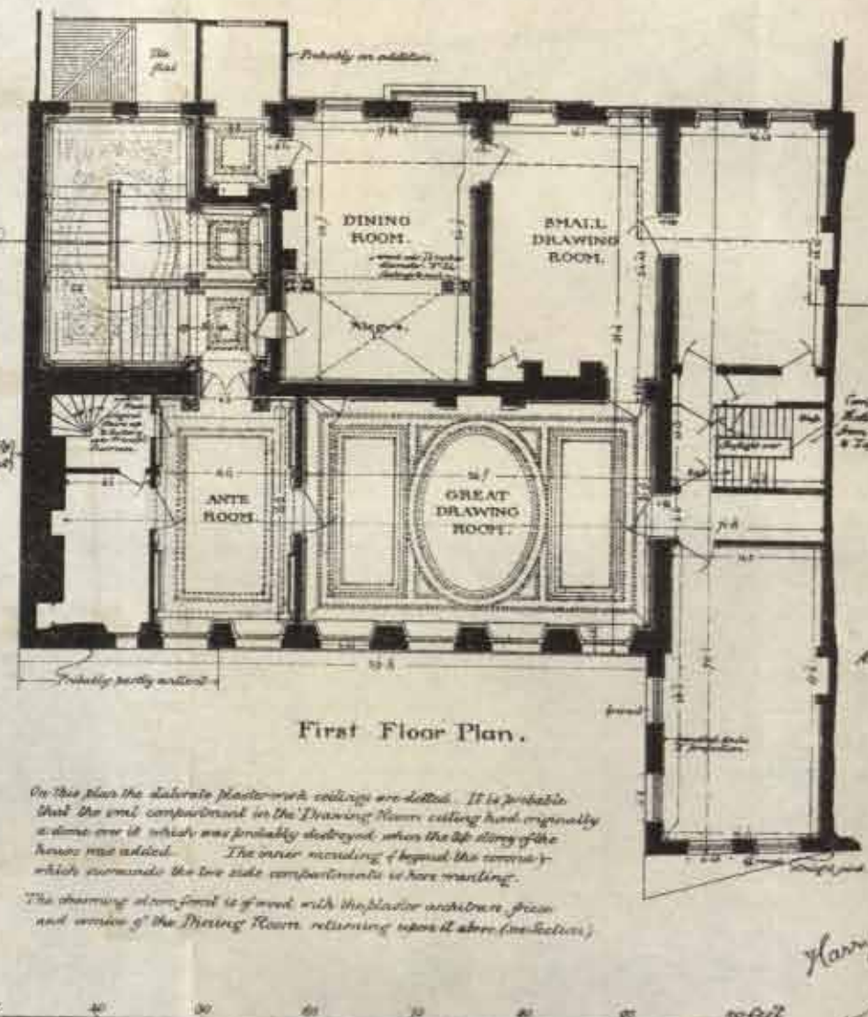
The house is evidently built upon the site of part of the old Monastic Buildings and some of the old walls have been apparently utilized. It is impossible to discover to what extent as there is so much panelling, but such walls as appear to be ancient are noted on the Ground plan. Most of such had probably fresh walls raised upon them above the Ground storey.



Ground Plan.



Section on line A.—A.



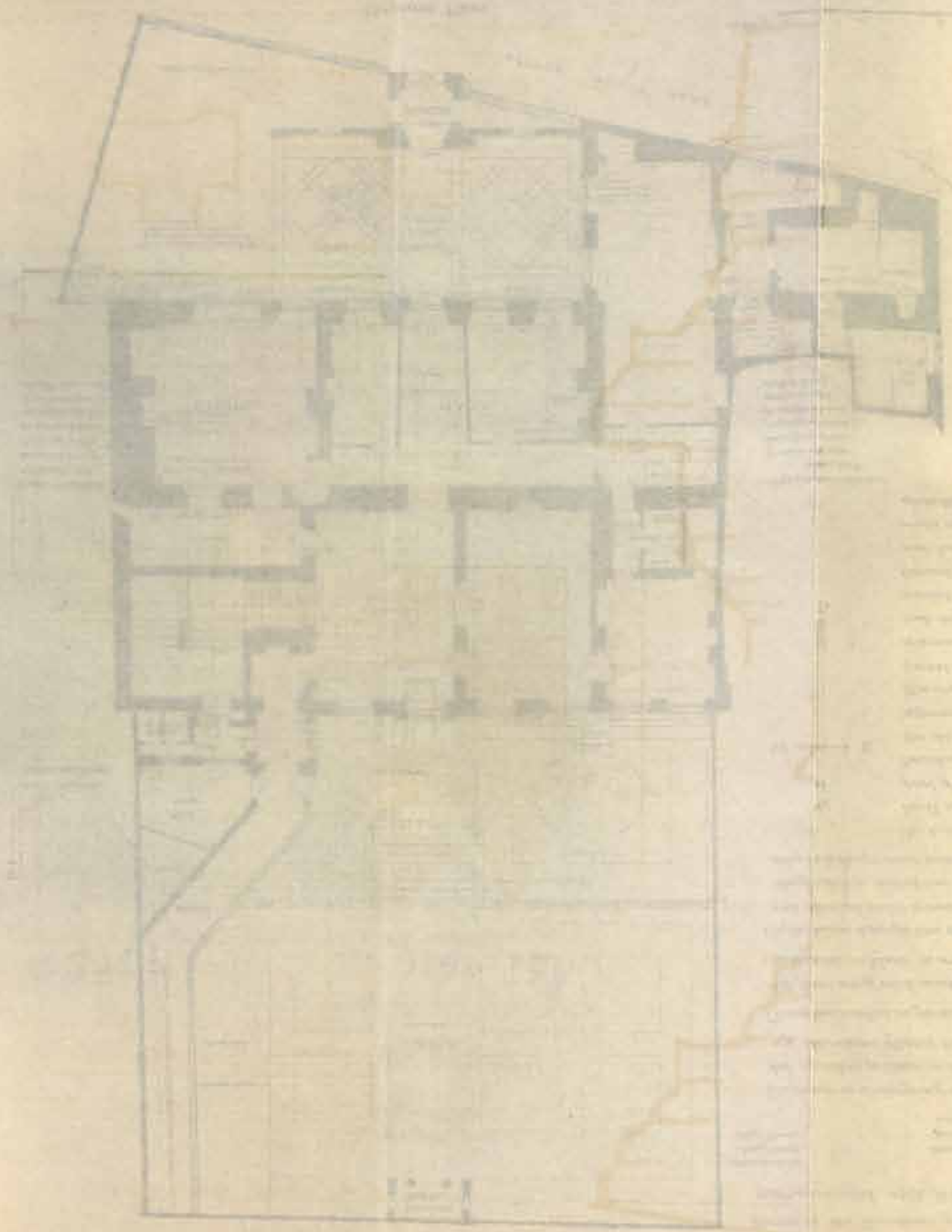
First Floor Plan.

On this plan the elaborate plaster-work ceilings are dotted. It is probable that the oval compartment in the Drawing Room ceiling had originally a dome over it which was probably destroyed when the 2d storey of the house was added. The corner moulding of beyond the cornice which surrounds the two side compartments is here wanting.

The charming stone fireplace is of wood with the plaster architrave, frieze and cornice of the Dining Room returning upon it above (see Section).

Harry Sirr 1882

Scale of 0 10 20 30 40 50 60 70 80 90 100 feet



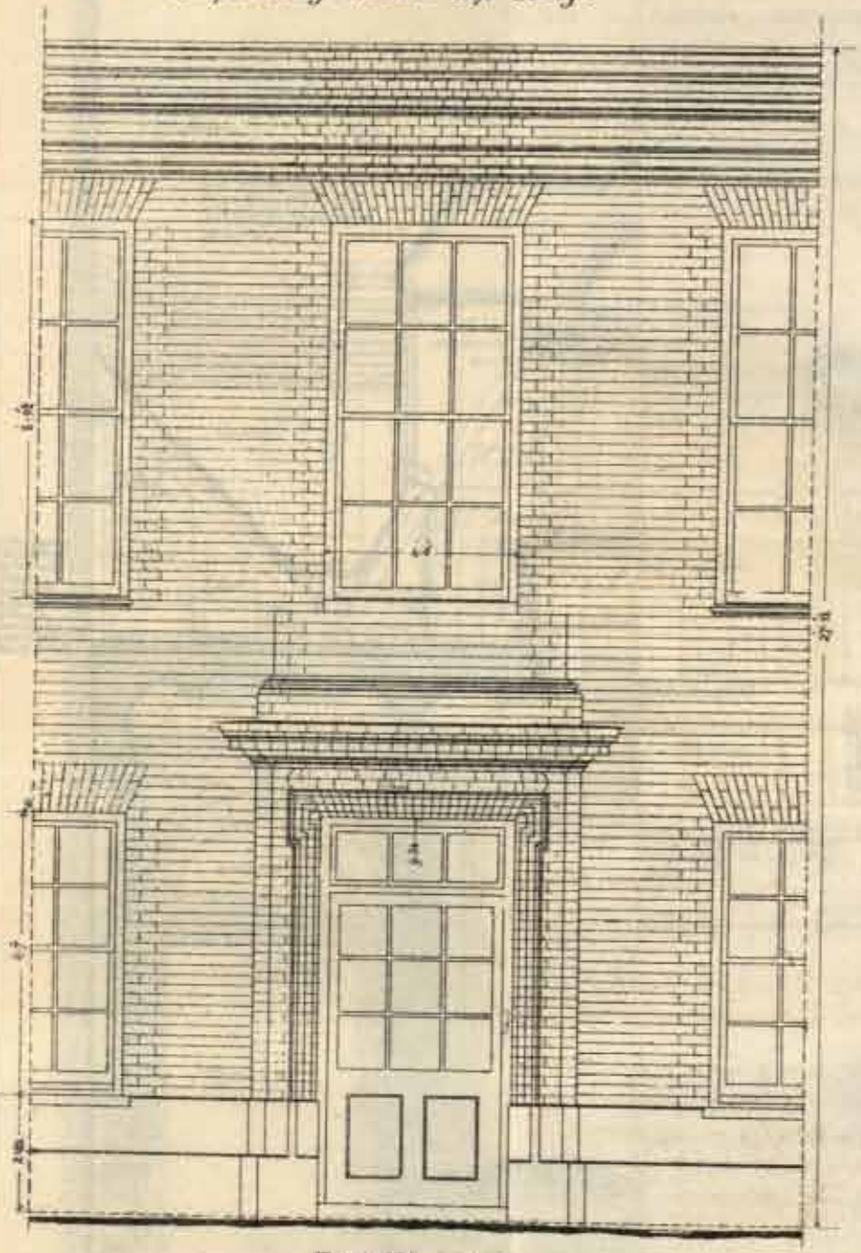
Ashburnham House · Westminster · Garden front and details ·

Comparatively Modern Top Storey.

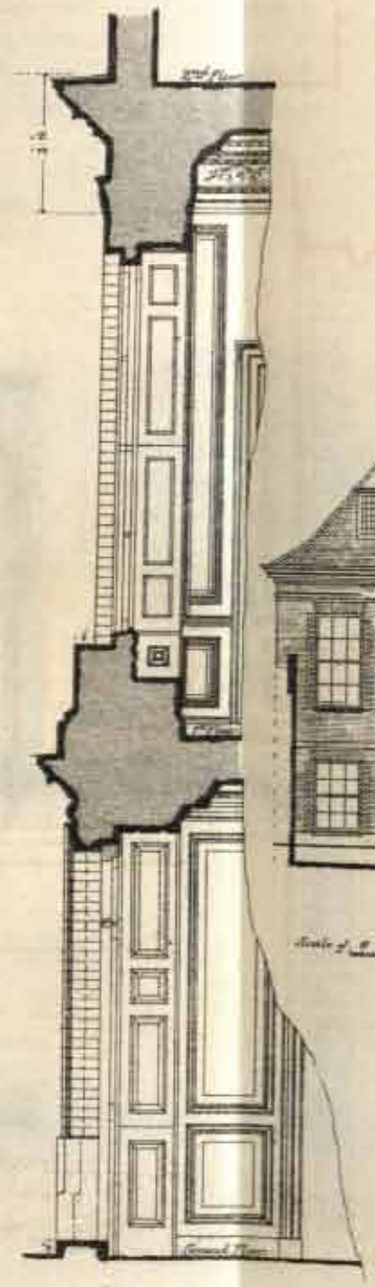
The arches, and quoins of windows and doorcase are rubbed and gauged in addition to all the work given in quarter full size details upon this sheet —

In the Rubbed work the joints are one eighth of an inch in thickness. Three strechers work to 2'-2", and three headers to 13¼ inches.

The whole front is of red brick in Flemish bond with a stucco plinth.



Part Elevation.



Section taken through centre of Doorway.



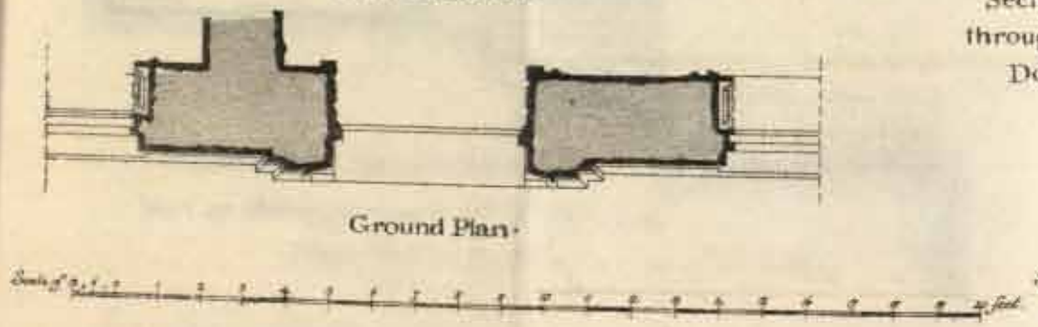
Entire Garden front.

The whole doorway is of rubbed work. It is built in with a straight joint as indicated.

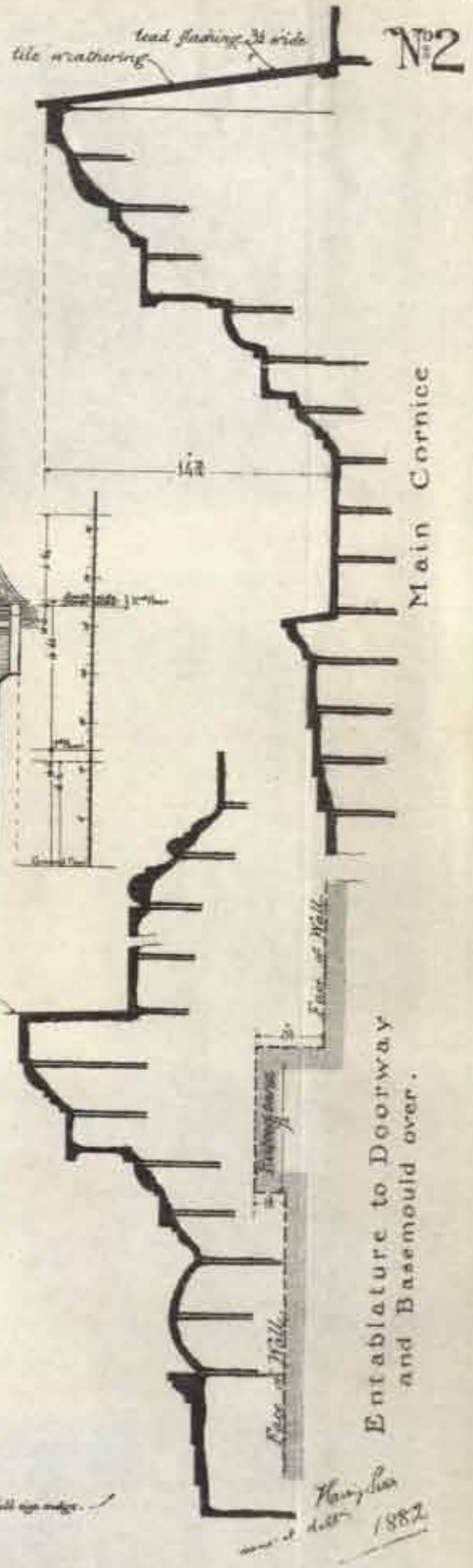
The top storey (upon which is dotted the probable outline of original roof — see also sheets N°s 386-) is uninteresting. It is finished with a few coursing courses thus —



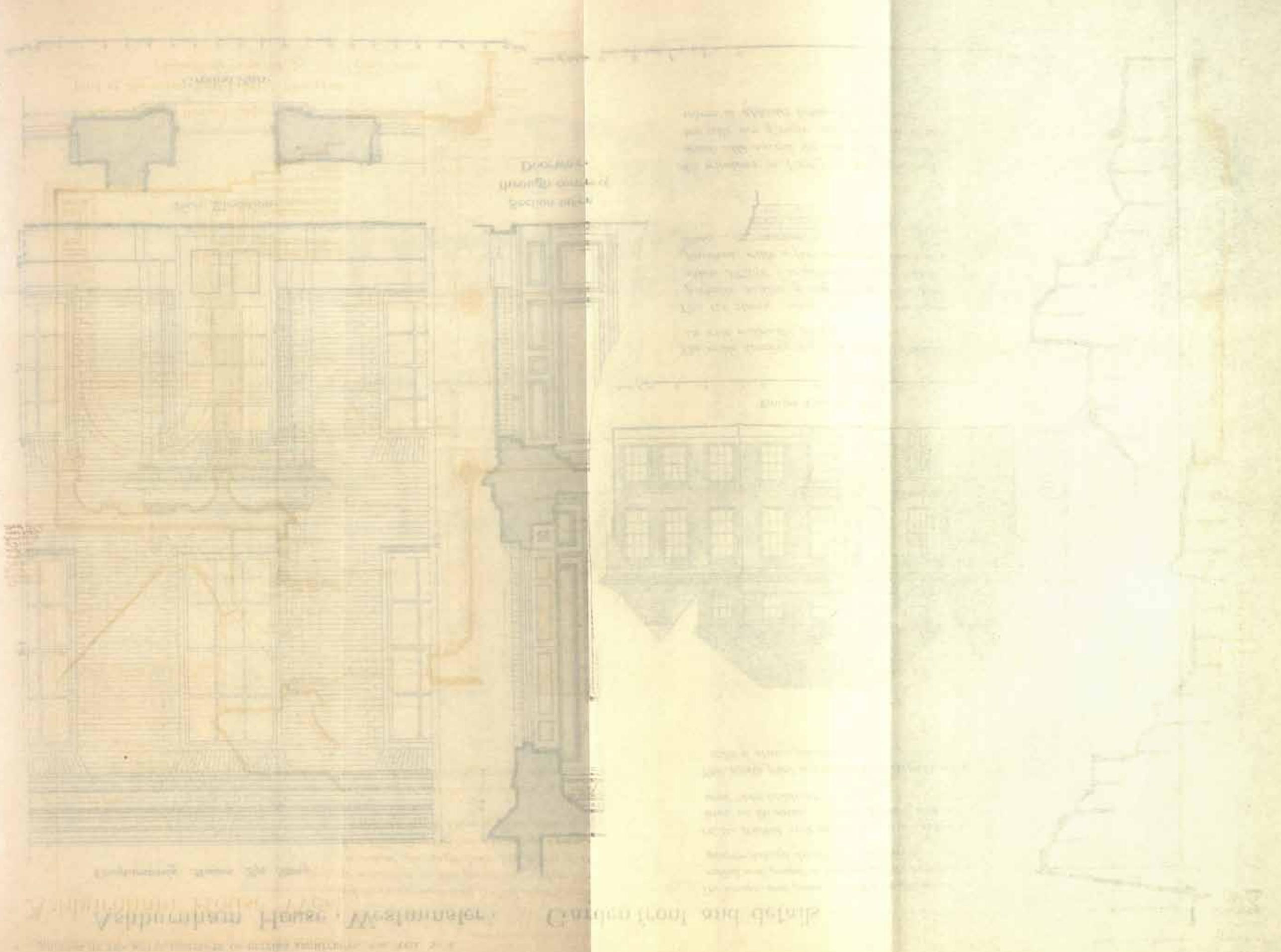
All windows on First floor have moulded wood cills — except the two Westernmost where the cills are of stone, and the centre window where it appears to have been cut away



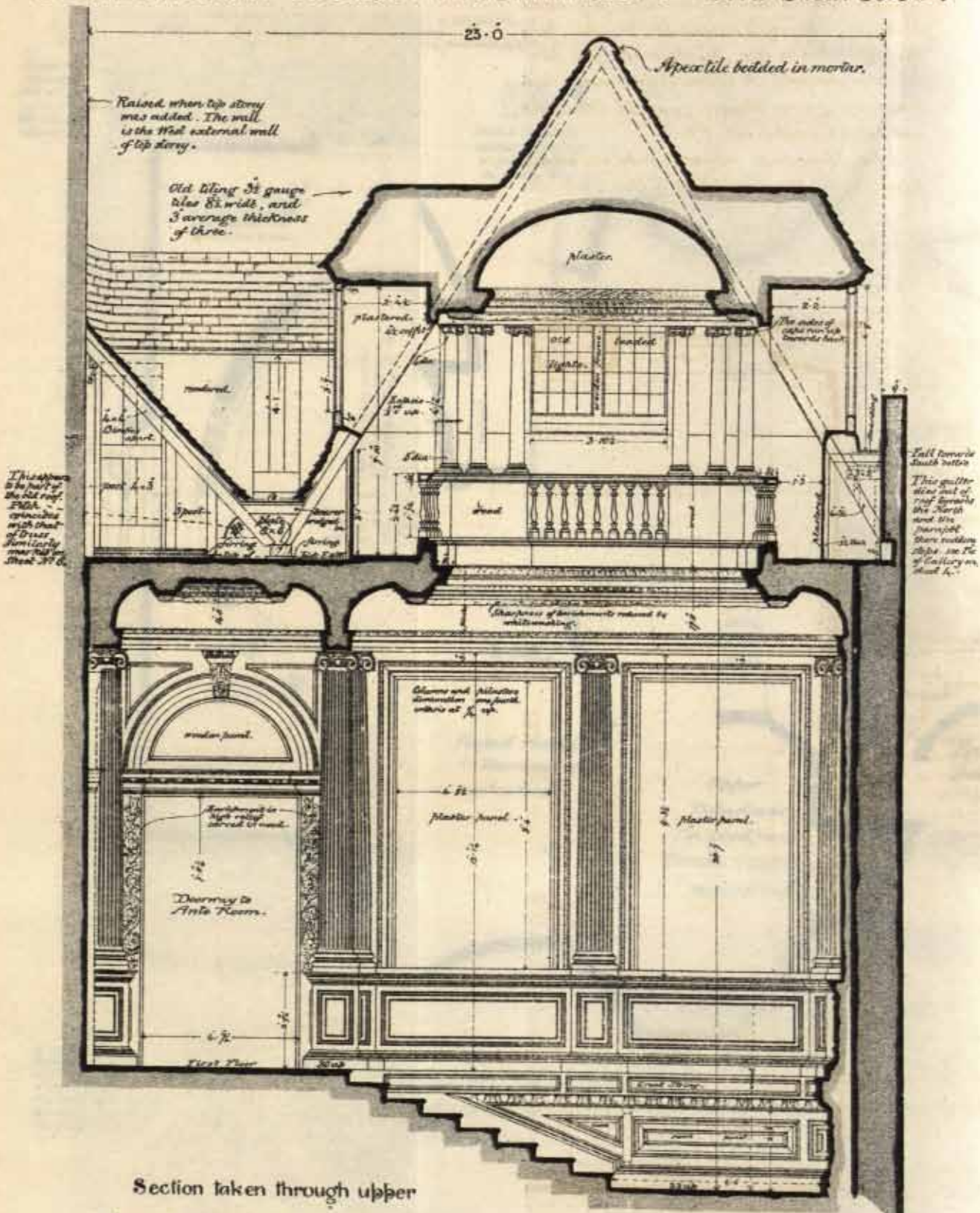
Ground Plan.



C.F. ROWE & SON, PRINTERS, LITTLE PETER STREET, WESTMINSTER.



Ashburnham House. Westminster. The Staircase.



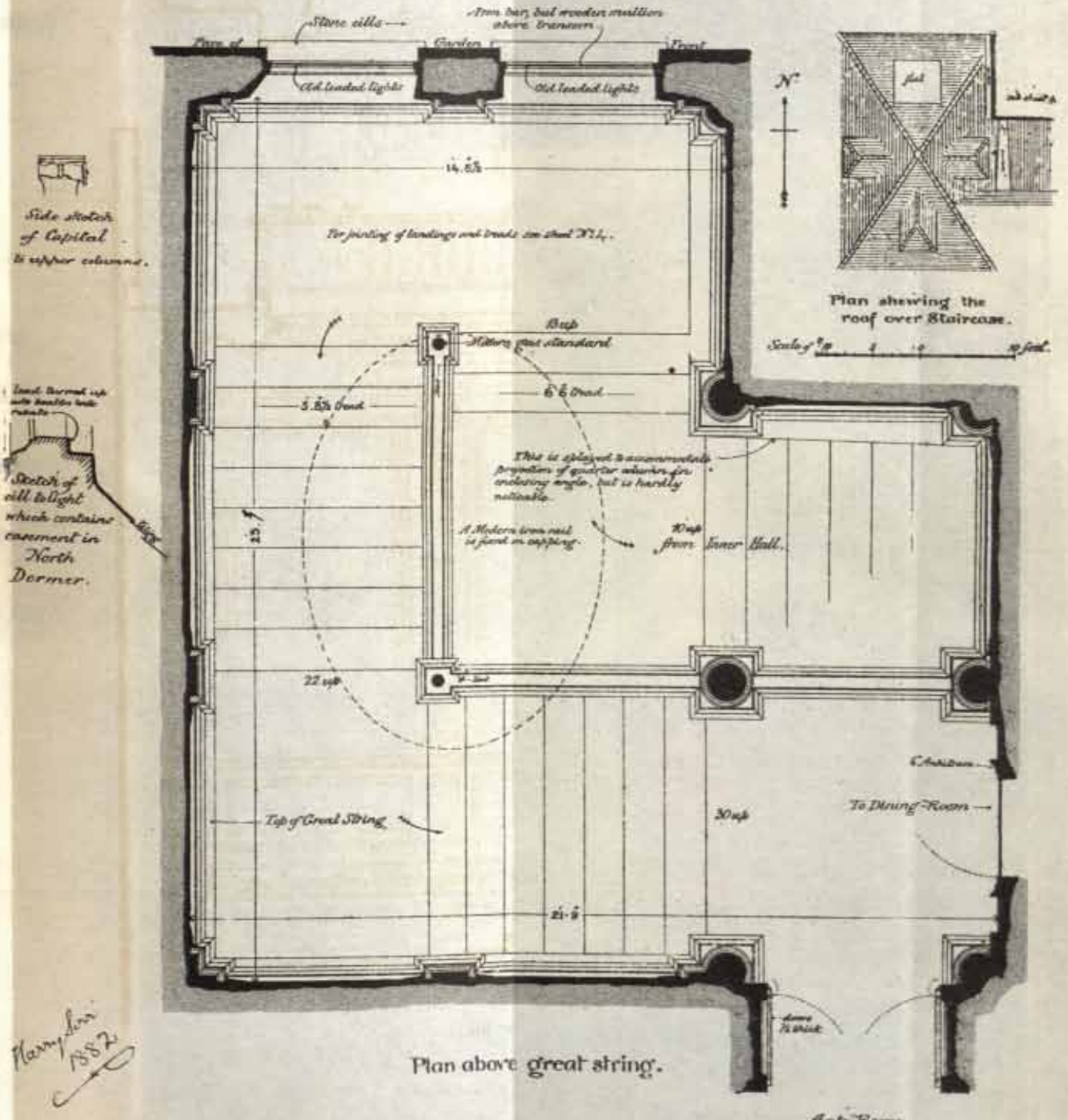
Section taken through upper part of Staircase - East to West - thro' centre thereof.
(balustrade removed.)

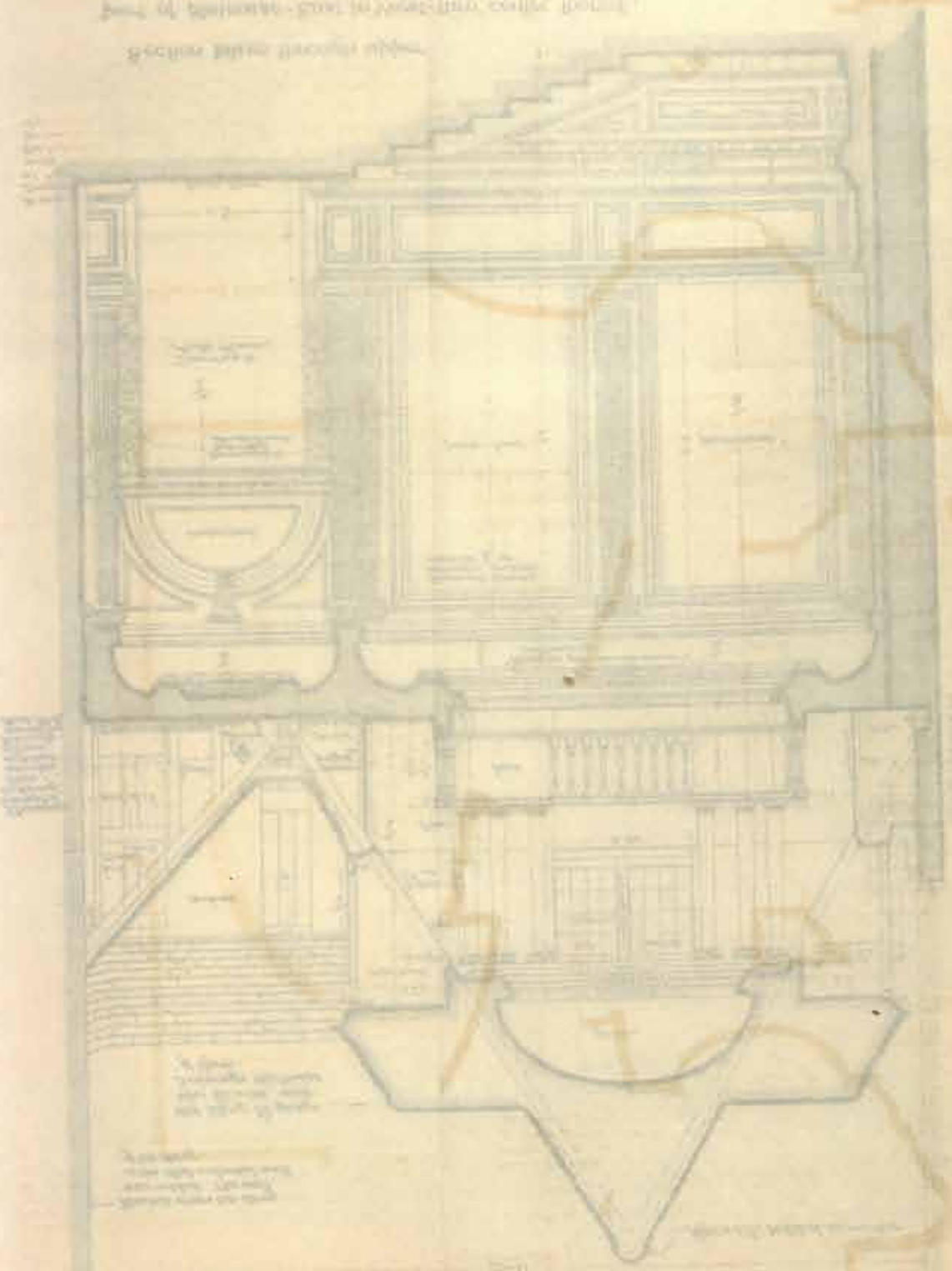
C.F. KELL & SON, PHOTO-LITHO, 2 & 3, TOTHILL STREET, WESTMINSTER.

No 3

The other walls of Staircase are treated in a similar way to that shewn on the Section, the differences in height being adjusted in the panelling below Great string. On the North wall the two window openings take the place of the plaster panels in Colonnade; and, on the top landing the two Doorways, both of which have the same detail, except that the one leading to Dining Room has a semi-elliptical archivolt Etc:.

The Staircase appears to be mostly in Oak, but all the woodwork is painted white with the exception of the Balustrade and the skirting or wall string.





Ashburnham House. Westminster. Details of The Staircase. 1882

N° 4.

Plan of Gallery – upper half thro' Balustrade.
– lower " above "

Plan at Half-landing shewing spacing of balusters, and jointing of landings and treads.

Sketch of Dragon-piece and angle-tie in South West corner of Gallery concealed by the quartering below rafters at A. A. The timbers are quite rough.

Although the Dragon-piece is at right angles with Angle-tie the hip rafter is not in consequence of the shape of roof

Profiles of mouldings of woodwork from bases of Colonnade downwards.

N.B. The difference in height of the walls around Staircase are adjusted by variations in the height of lower panels, by either deeping the lower side to accommodate the rise of stairs, or by heightening or reducing the landings as the case may require.

Coffer Moulding and Great Carette above top landing (all in plaster) and Architrave (in wood).

Nosing to treads and landings.

Upper Mouldings below Dome. All in plaster.

Moulding similar to those respectively of the capping and plinth of Principal balustrade are continued around walls of Staircase, the former as a capping for the pedestals and intermediate panelling, and the latter as a plinth throughout, and as a skirting around landings & up walls at side of flights.

Impost moulding to Doorways on top landing.

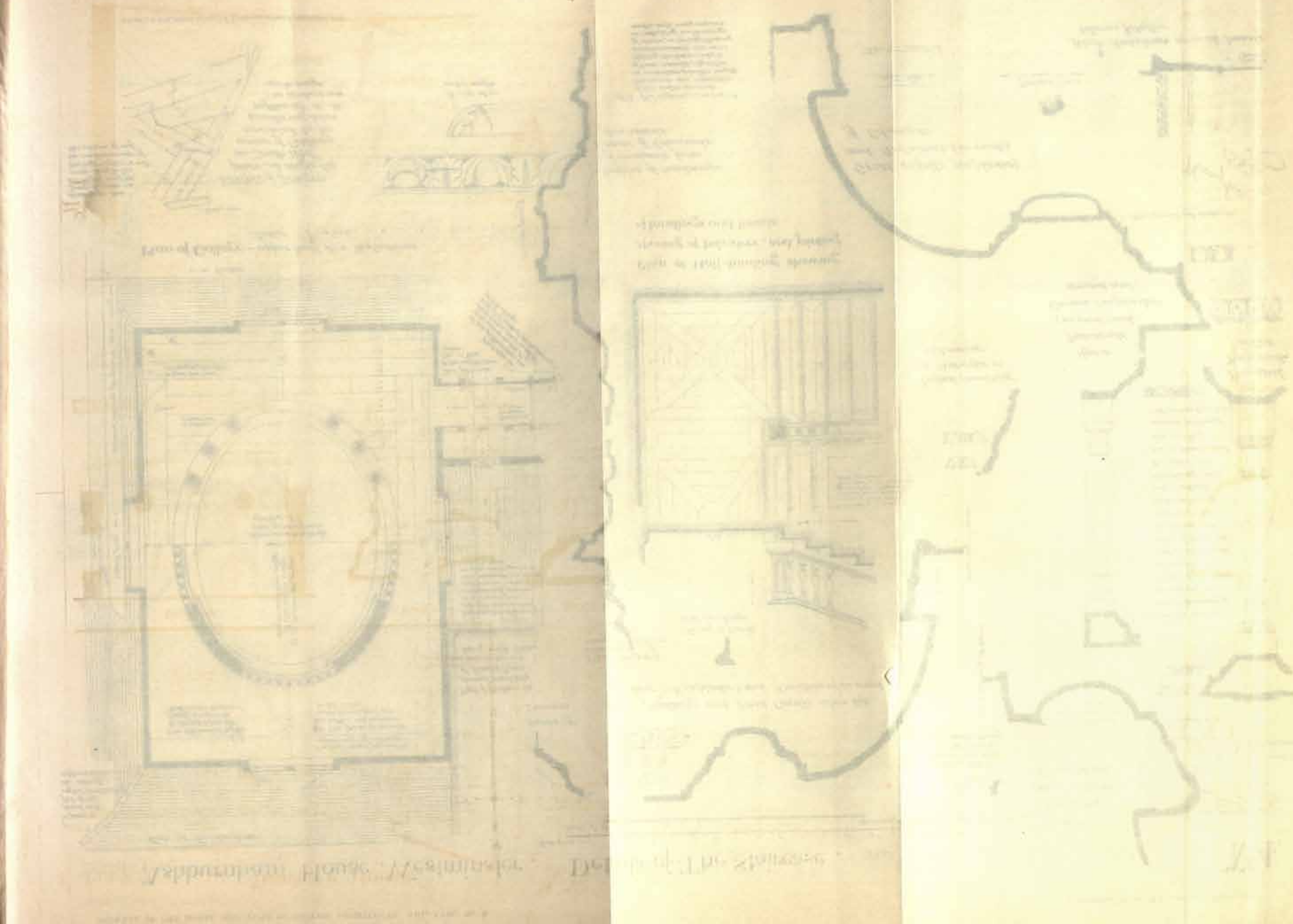
Upper Balustrade (in wood) and Cornice (in plaster) around oval.

Principal Balustrade in Oak.

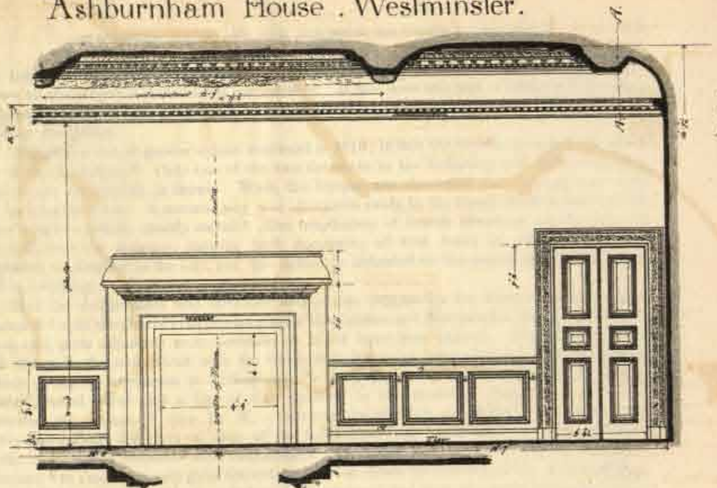
Great carette (in plaster) and Architrave (in wood) of Colonnade.

Wood Architrave around panels between pilasters

E.P. KELL & SON, PHOTO-LITHO., 3 & 5 TOTHILL STREET, WESTMINSTER.

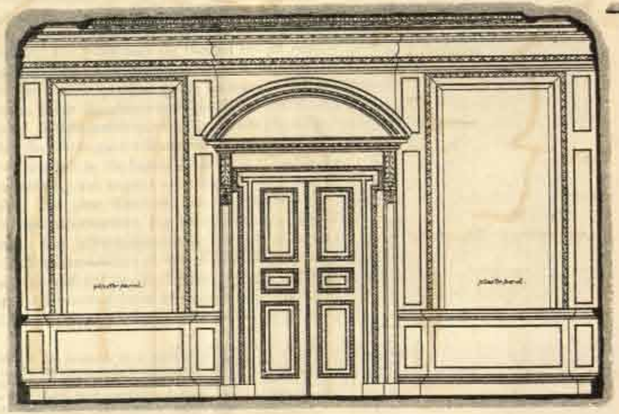


Ashburnham House. Westminster.

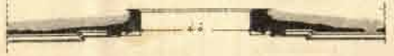


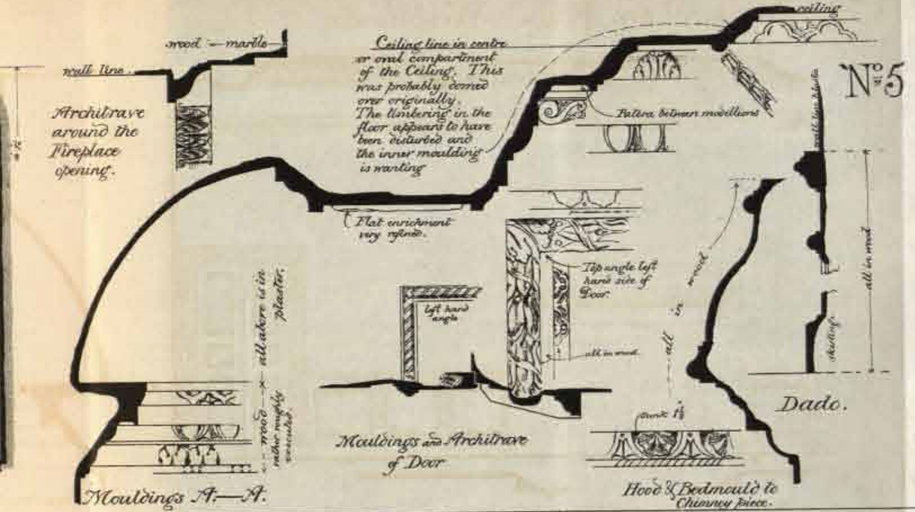
North Side of Great Drawing Room opposite side contains four windows.

Scale of ... feet for ½ full size profiles.

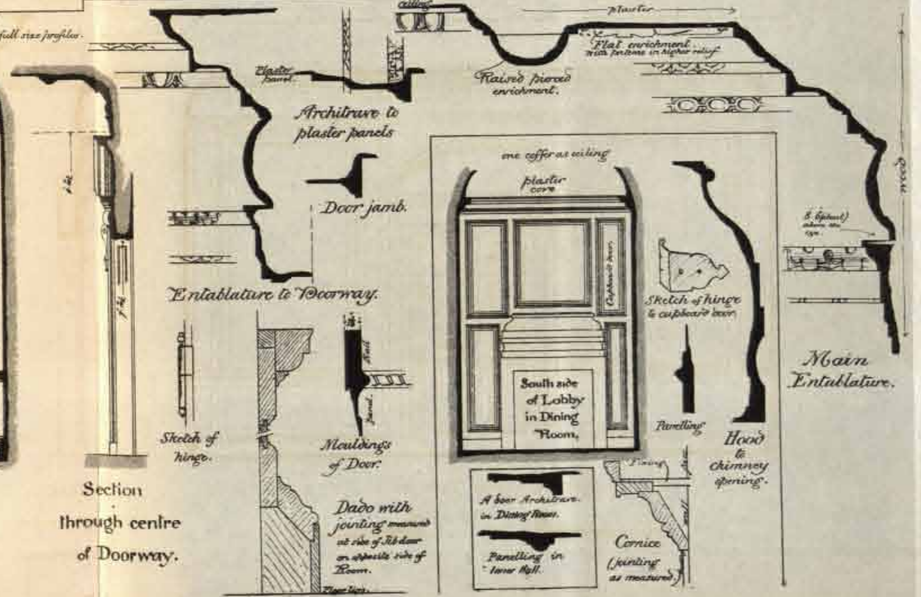


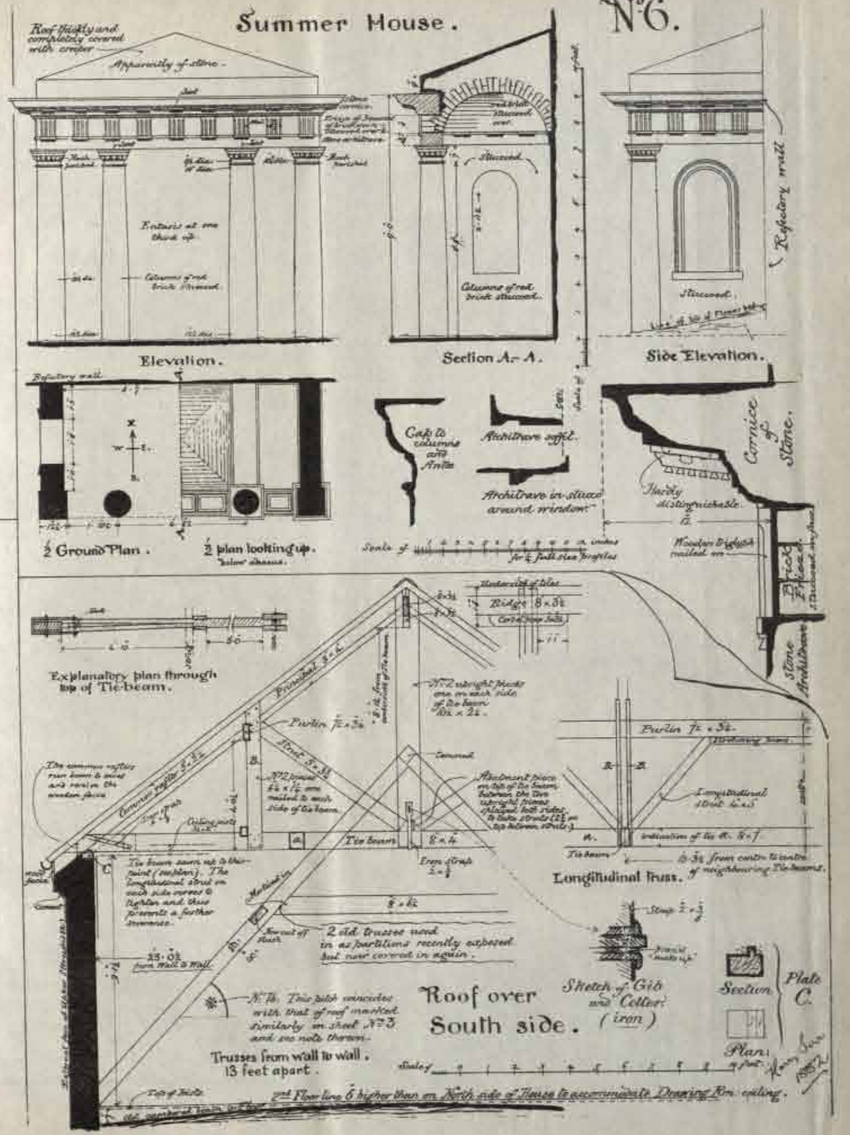
Side of Anle Room ~.

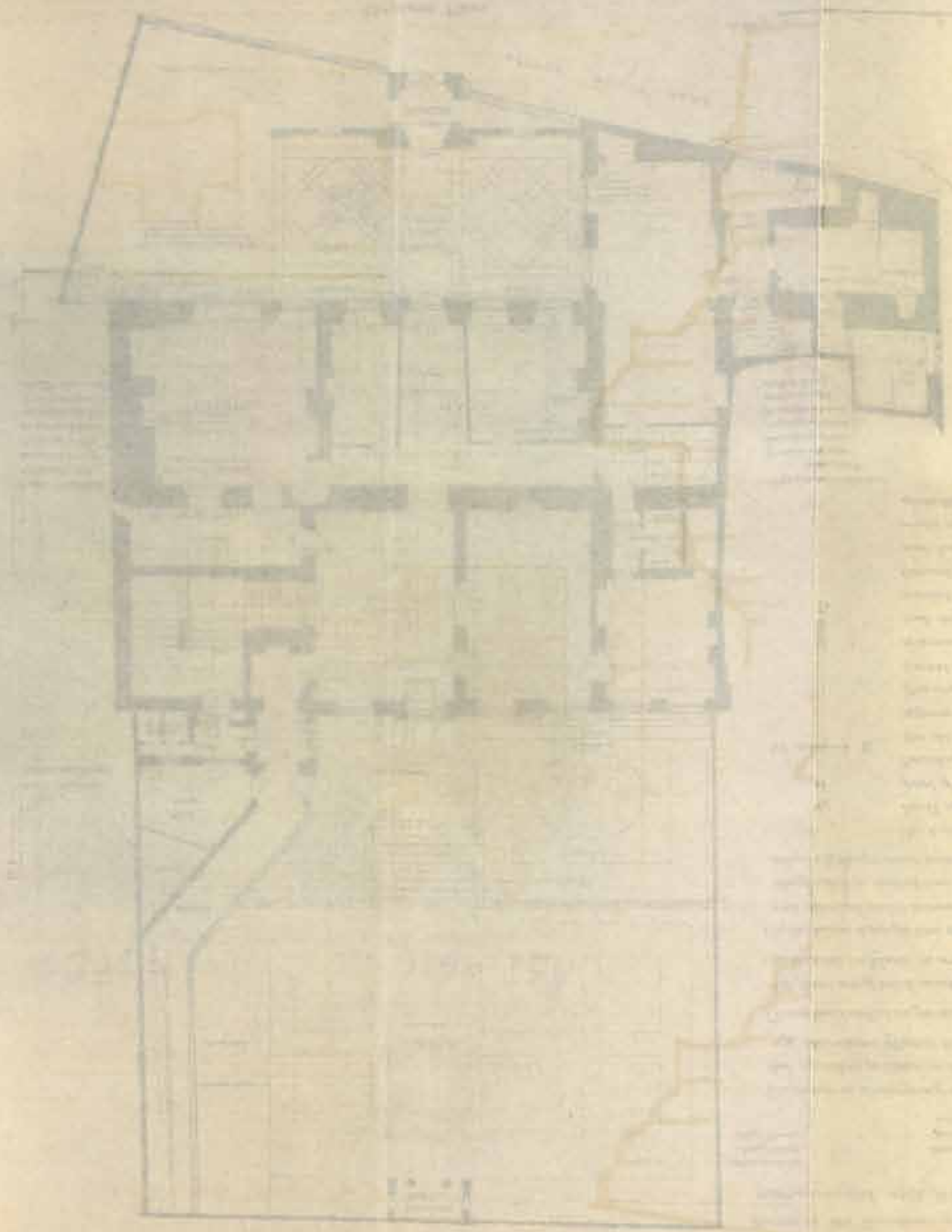




N°5







the training of the Abbey choristers, I believe. The internal walls on the ground floor are shown on the largest scale ordnance map of 1873. If this were enlarged, a fairly accurate plan, with Ashburnham House on the west, might be compiled, which would of course show the wall dividing the garden.

The garden was of greater extent westward in 1710; in fact the terrace occupied the whole site of the Refectory.* Only one of the two doorways in the Refectory wall, that which was then in use presumably, is shown. When the terrace was shortened the doorway went with the part surrendered. A covered way was afterwards made to the Great Cloisters through the other doorway, which exactly suited.† The frontispiece of Scott's *Gleanings* gives a view of the wall next the cloisters, showing both doorways; all that could be related about the Refectory is recorded in the text, and the outline is indicated on the general plan of the Abbey and its buildings.

Had the contributors who furnished antiquarian information for Scott's *Gleanings* been acquainted with the plan of 1710 (drawn plan of the Cloisters and Westminster School, with Dean's Yard and parts adjacent) most probably it would have been utilised. Mackenzie Walcott and Weare both briefly dealt with the Great Malt House or Long Granary of the Monastery (which Widmore attributes to Litlington), "a building elevated on a substructure having a large central tower and a line of fine windows in two stories." They gave references, including the engraved view by W. Courtenay dated 1758 and 1760,‡ and an account of the subsequent discovery of some of the foundations and substructure in 1815 published in the *Gentleman's Magazine* with illustrations. The much earlier plan of 1710, to which no reference was made, not only gives the entire plan, but shows the actual position of the building, then the Dormitory of the King's Scholars, to which use it had been converted when the College was founded. It had become ruinous: this plan, prepared to show the site of the New intended Dormitory, entitles it "the Present old Dormitory." Adjoining, at a right angle, the College Brewhouse and Bakehouse are shown facing Dean's Yard, then called Great Dean's Yard, and considerably smaller than Dean's Yard of later times and the present day.

Sir Edward Hannes, an Old Westminster and physician to Queen Anne, bequeathed £1,000 towards rebuilding the Dormitory on the old site in Dean's Yard, and enjoined the Dean and Chapter to consult Dean Aldrich and Wren. Wren, who found it impracticable to rebuild on the old arches, was adverse to spending money on repair. Both the testator and Dean Aldrich died in the very year in which the plan was prepared to show Wren's proposed building on a site in the College Garden. Much trouble ensued, and eventually litigation over the proposal, and it was not until 1721 that the Lords gave a decree in favour of the Garden site. Subscriptions were raised, and the matter was left in the hands of the Earl of Burlington. Wren's design was abandoned. No doubt the building was erected according to Lord Burlington's ideas, but with the assistance of an architect. The plan, however, was derived from the Granary. It is simply a very long room on a vaulted substructure, the latter originally left open like a covered playground, and since enclosed. The substructure may have been adapted from Wren's plan, but Wren adopted the leading dimensions of the old building for the upper floor, which was the main consideration. So well did the old Granary suit the purpose until it needed extensive repair.

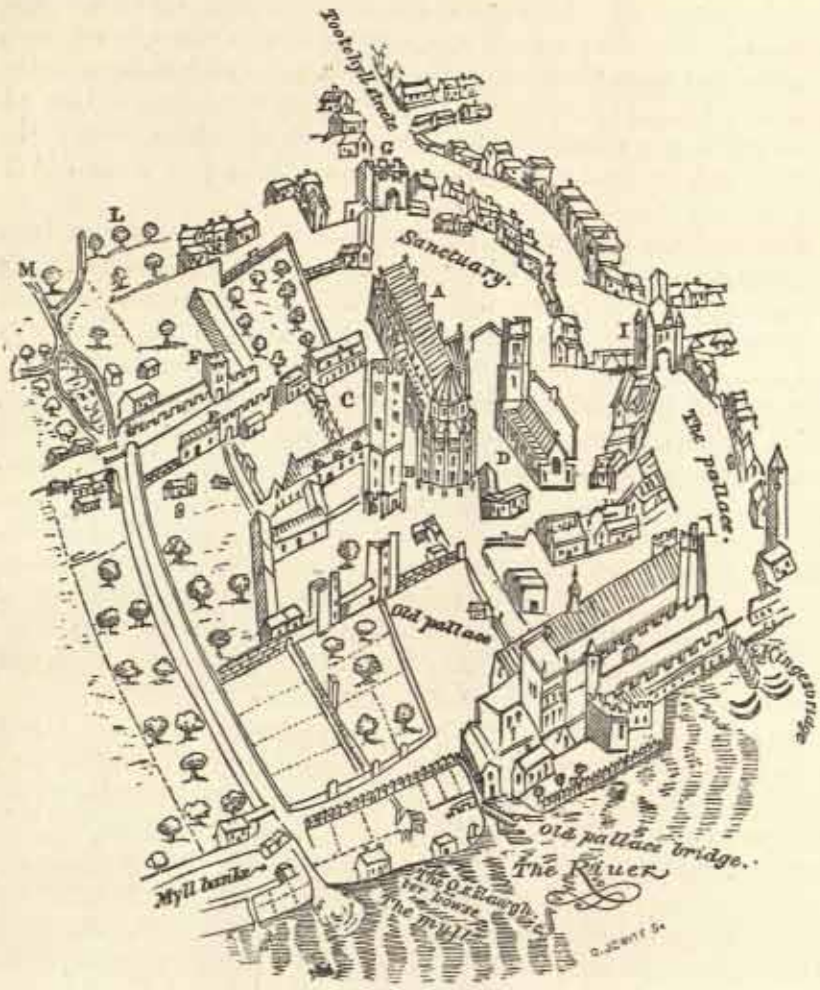
Sometimes it is asserted (upon what authority I have not discovered) that the old Dormitory was repaired, and housed the King's and Cotton Libraries after the fire at Ashburnham House.

* The axial line of the house is at a right angle with the south wall of the Refectory in its centre according to the plan of 1710.

† The house was isolated from carriage communication, and the way made it possible to reach a carriage under cover by way of the cloisters.

‡ Welch's *Alumni Westmonasteriensis*. The reference supplied is to the edition of 1852. But the edition of 1788 has the views. The British Museum copy I have previously referred to in connection with the extra illustration inserted.

The Doorway at the foot of the steps giving access to the School is often attributed to Inigo Jones. It was not until 1734, eighty-two years after his decease, that the Chapter agreed to contribute £50 towards the expense of taking down the old and putting up a new door and Doorcase, and the old plan is evidence that it could not have existed in 1710. The Steps, which had been there most probably from the foundation of the College, were renewed seventy years before the Doorway was rebuilt. Busby's account book, 1664, has an entry of £4 for making the "new Staire by the Schoole." *



PLAN OF THE PRECINCTS OF WESTMINSTER ABBEY, FROM A MAP OF WESTMINSTER, UNDATED, BUT PROBABLY OF THE TIME OF QUEEN ELIZABETH.
From Scott's *Glossings*.

A, Abbey Church; B, Lillington's Bell Tower; C, Cloister; D, St. Margaret's Church; E, Tower over entrance to Little Dean's Yard; F, Granary and Brewhouses; G, Gatehouse; H, Broad Sanctuary; I, Gate to Palace Yard; K, Almonry; L, Orchard; M, Stream of Water.

Busby was responsible for the room at the head of the steps called "The Museum." It was intended as the Library, and so used, "built and fitted by me," according to Busby's will (1695) "at my own great costs and charges." The ornamental ceiling, door joinery, and fitted bookcases are the principal features. The ceiling is a very fine example of Italian treatment under English influence, and the woodwork is elaborately carved. In appearance the work is later than that of Ashburnham House, more like designs from the hand of Wren, but generally attributed to Inigo Jones. Busby's account book with expenditure on the school repairs and fittings gives some payments in 1656 possibly concerning the Library: a carpenter's bill £104, bricklayer £73. 15*s.*, and an unnamed carver, £26; heavy items bearing in mind that Busby's stipend as prebendary for one year (1664) was £28, and as headmaster £20. In 1659 he paid Ad. Osgood † "in full for Presses and seats for Bookes in the Library of the Schoole the Summe of eighteene pds." The next year the same creditor had £13. ‡

* *Memoir of Richard Busby*, G. F. R. Barker, 1895.

† Probably Adam Osgood, who subsequently was clerk of works to the Dean and Chapter. He is mentioned in the Chapter Book as early as 26th April 1662. He and his wife are buried in the north cloister. *Vide* Chester's *Registers of Westminster Abbey*.

‡ *Memoir of Richard Busby*, G. F. R. Barker, 1895.

The elevation facing the College garden has been altered, as may be seen by comparing T. R. Underwood's water-colour drawing of 1792 [*see headpiece*, p. 193] with J. R. Smith's view of 1808. The earlier view shows almost the whole width of the front broken forward 9 inches or 14 inches, with flush stone quoins alternating with the brickwork and returning on the ends of the thick main wall.* This wide projection is covered by a segmental pediment rising from a stone cornice some distance above the eaves. The cornice returns properly on the ends of the main wall, which is carried up a few courses above the pediment and finished with a segmental gable having a tall finial on each side. A segmental band of stone immediately above the pediment and following its curve is connected with the gable coping by a large keystone. Only the moulded work of the pediment and dressings appear to have been of stone.

The portion of Ashburnham House by the School Entrance had an elevation of two stories next Little Dean's Yard, with two gables rising from a horizontal band at the plate level. The gables were connected with brickwork between them finished horizontally at about two-thirds of the height, and there were two shuttered windows on the first floor, below the band and central with the gables. The simple elevation grouped well with the projecting stone Doorway of the School, the long curve of a ramped wall rising with the steps to the Ionic portico, and the high roof and front of Busby's Library towering behind. †

The drawing from an Elizabethan map, really a bird's-eye view, of the Abbey and surroundings, reproduced in Scott's *Gleanings*, shows the site of Little Dean's Yard free of buildings. ‡

In Queen Anne's time it was a mere passage way from Great Dean's Yard giving access to Ashburnham House and the opposite premises and leading to the School and Dark Cloister. The premises with walled gardens or courtyards opposite Ashburnham House were cleared away about the year 1790. The present open space forming Little Dean's Yard was then made and three houses were built, as shown in Radclyffe's drawing of 1845. § One of these has been rebuilt in recent years and the harmony of the block destroyed.

The Elizabethan map shows a gateway in the position subsequently occupied by the porch of Ashburnham House.

The Little Cloisters as known doubtless were formed when the house overlooking the College garden was built, according to Radclyffe, in 1689 by Busby, who intended to retire there in his old age, but never seems to have occupied it. The ceiling, of similar character to that in the Library, is said to have been given him by some of his pupils. The prebendal houses carried over the north and east walks of these cloisters in all probability were contrived at the same time.

I feel sure much further information might be gathered concerning the precincts of the Abbey, and I would suggest as subjects for measured drawings the large Schoolroom, and the doorway from the Star Chamber, Busby's Library and its bookcases, and the Entrance, and any work of interest in the prebendal houses.

NOTE.—The writing to the scales for profiles on the measured drawings of Ashburnham House denotes that they are one quarter the actual size. This is the fact when reading the original sheets, 30 inches by 22 inches, imperial size, which have necessarily been reduced; but the scales themselves, of course, still stand as the true scales of profiles.

* Remains of this treatment are discernible on the north side of the opening at the head of the flight of stone steps leading up to the School from the Doorway.

† All shown on T. R. Underwood's water-colour view of 1792.

‡ The map is not altogether reliable. The Misericorde buildings are not shown, nor is the Chapter House.

§ *Memorials of Westminster School*, C. W. Radclyffe, 1845.

WITH SHARE AND MATTOCK.

By John W. Simpson [*F.*].

Read before the Northern Architectural Association, Newcastle-upon-Tyne, 8th December 1909.

"I' a stubb'd Thurnaby waäste."—Tennyson, "Northern Farmer."

"CONFERENCE doth both lerne, teach and exercise at once," says Montaigne, and it is the pleasant custom of architects, as of most other serious professions, to form themselves into Societies, which meet now and again for the reading and discussion of papers concerning their especial craft. As this custom is of some antiquity, and shows no sign of disusage, we may assume that it has given reasonably fair results in return for the labour bestowed upon the preparation of the aforesaid papers and the inordinate patience required of those who listen to them. Indeed, the exercise of the latter virtue cannot but be most profitable to those of our trade, whose daily duties demand its very perfect quality. That your President should have distinguished me by his invitation to address you to-night shows his great faith in the degree of tolerance attained by the Society he so ably directs, and I will endeavour not to abuse his confidence.

The Northern Farmer's words which I have chosen as the title of my paper—you will remember Ruskin's reference to them as an instance of the good work of the world done in pure and unvexed instinct of duty—seem to me to suggest so well the quiet, dull task which we architects have to accomplish without reward of notable result that I shall venture, at the risk of your surprise, to commend to you the merits of the Ploughshare and the Hoe, two instruments not usually included in an architect's equipment. For in the affairs of our profession, as we now know and practise it, there has been, and still remains, much waste land to "stub," ungenerous ground, rendering but slow return to the courageous labour which is ever breaking it to husbandry and keeping down the growth of evil weeds. This need for constant "stubbing" is dispiriting enough at times; for while some stand aside and sneer at the scanty outcome of so long a toil, others become obsessed with the mere mechanics of the operation and mistake the means for the end. A wide and philosophic review is needed now and then to compare the half-forgotten past with the still unachieved future, that the workers may keep a brave heart and be inspired with fresh loyalty to their common enterprise. For if the Share and the Mattock be neglected, the hope for Harvest is but vain.

I have introduced my subject by a metaphor—with which I will trouble you no further—rather than by an apology, the better to explain the aspect from which I wish to suggest its consideration. You will have already guessed that "Thurnaby waäste" is the everyday, bread-and-butter business of our profession, that hard-won soil whereon we nurture our aspirations for a noble fulfilment of our art; and that its "stubbing" is the task of our Royal Institute of British Architects and its "Allied Societies," of which your own Association is among the most venerable—there are but three, I think, of earlier foundation—and the most vigorously administered. It is precisely of its work in this direction that I propose to speak this evening, rather than of less homely, if perhaps more attractive, artistic ideals. The question "Of what practical good is the Institute?" is one that we too often hear asked, and I shall try with great deference, as one of the least of its apostles, to offer you an answer to that inquiry.

No one of our calling who has not been "born with a silver spoon in his mouth"—and, alas! fairy godmothers are rare and baby architects are legion—can regard without personal interest that system of competition which has become, for good or for evil, so closely allied with the getting

of work. It is seldom nowadays that a public building of any importance is erected without an invitation being first issued to architects to submit designs for comparison and selection upon their merits. There is much in favour of the method. In no other profession has a young man so great an opportunity of distinguishing himself in open contest with his seniors, and of obtaining employment at the outset of his career; in no other profession can he continually exercise his mind upon the solution of the higher problems of his calling, developing his ability while striving for his livelihood, instead of growing rusty and discouraged by lack of occasion for practical activity.

Naturally there are drawbacks, the greatest, perhaps, the temptation to shorten the period of training in order the sooner to gain monetary reward, which produces a swarm of ill-equipped adventurers, who lower the general standard of attainment in their art and gamble hopelessly for the chance of prizes beyond their reach. As to the "cost to the profession," so often urged as an argument against competitions, I confess myself but little impressed. I have heard it seriously advanced that the value of the wasted work in a competition is frequently far greater than that of the commission to be earned by the successful competitor. The reasoning is quite fallacious: the work is not wasted if it has caused a large number of young men to thoroughly study a subject with which they were unacquainted; and the true estimate of its cost is not what it would involve to have so many drawings produced at remunerative rates, but, what the authors would have earned had they not been engaged upon them! In by far the greater number of cases they have profitably occupied what would have been otherwise idle hours, and the few shillings for strainers and paper—which as a pretty old competition hand I may be allowed to say was all my essays used to cost me—is but a light price to pay for the experience gained, to say nothing of the inestimably precious habit of strenuous work. "Lottery," too, is a favourite term of disparagement. Now, anyone who engages in competition in the spirit of one adventuring in a lottery may rest assured that fortune will not favour him. The closer analogy is that of a race wherein, if you know the intending runners, you may place the winners upon their "previous form" with reasonable accuracy. I will not deny a spice of hazard—and what then? Human nature being what it is, we must all have hope as a stimulant to endeavour, and a sporting instinct is no bad basis for the larger philosophy of life.

But the suggestion of gambling reminds me of a time, well within my own recollection, when architectural competition was indeed a very game of chance, where, moreover, the most part of the unfortunate competitors were playing against cogged dice! To revert for a moment to my titular parable, I would ask you to remark here a considerable stretch of ground cleared of tares by the patient labour of the Royal Institute. Here, surely, has excellent "stubbing" been done!

It is an accepted condition by promoters of competitions nowadays that a competent Assessor must be appointed, and it is a rare exception for the result to be decided otherwise than honestly. May I add that the disposition of some competitors to question the justice of the Assessor's award is to my mind altogether regrettable and short-sighted? If persisted in it may cause promoters to ask whether it be worth while to appoint Assessors if the result of their desire to act fairly is to provoke public attack. Reflection will, I think, show that lack of loyalty cannot fail to react to the disadvantage of the dissentients themselves.

One word before leaving this important topic. Competition, as society is constituted, we cannot avoid, whether it take the form of striving to obtain commissions by patronage and influence, or of exhibiting proofs of skill to impartial judges. The latter method prevails in our own profession, the former in some others, and I see no reason to wish for an exchange. Our procedure in such matters is the envy of our Continental brethren, who are greatly bedevilled by that very "jury" system of assessing which some among us are anxious to introduce here! If they succeed they need not hope that promoters will allow them to compose their jury wholly of archi-

tects; laymen will presently be appointed to act with them, as abroad, and the last state of the competitor will be greatly worse than the first. It was gratifying to me when in Paris, last May, as representing the architects of Great Britain and Canada on the Commission which drew up a code of Regulations for International Competitions, to find the respectful interest paid to the views I was instructed to put forward, and to my description of the way in which we conduct competitions in this country. My report on the matter to the British Section of the Comité Permanent will be found in the JOURNAL of the R.I.B.A.*

This Standing International Committee, composed of architects representing some twenty-two different nationalities, including Japan, the United States, Mexico, and other distant countries, and originally constituted, as you perhaps know, for the better organising of the International Congresses, is becoming a very useful and influential body. The advantage of mutually comparing the methods and ideas of different countries is obvious, and the unanimity with which the Committee is consequently able to present its views to the various authorities with which it has to deal adds greatly to their effect. It is very largely owing to its persistent efforts and representations that the protection of their artistic rights was conceded to architects by the Diplomatic Conference on the Berne Convention last year at Berlin. As British Secretary it fell to my lot to draw up a general statement for the Government Committee, before which Mr. Belcher, R.A., and I were called upon to give evidence.†

The Report of this Committee has not yet appeared, but I have every reason to hope that it will recommend the ratification of the revisions made by the Berlin Conference.‡ As the Berne Convention can only be revised at intervals of ten years, and then only by unanimous agreement of all the subscribing nations, the result will be anxiously awaited by our profession. This country, with the exception of Sweden (from which I hear hopeful news), is now the only one which does not give to architects the same protection against unlawful reproduction and piracy of their work as is afforded to our brother artists the painters and sculptors. The Artistic Copyright Society is, however, now working in conjunction with the Royal Institute, and a draft Bill has been hatched between us, which will, we hope, find favour with whatever powers the General Election may put in authority over us.

It is of great importance that the Royal Institute and the Allied Societies should keep in touch with the various authorities concerned with public works and obtain information of proposed schemes in the early stages of their inception. Suggestions which offered at that period can be, and often are, adopted, or at any rate received with respect, are apt to be considered as superfluous if not impertinent when their adoption implies the recasting of an already formulated project. To this end the various Committees of the Institute are always on the alert. The Art Committee, of whose work I happen to know most, has two energetic Secretaries who, by means of a service of press-cuttings and otherwise, seldom allow anything to pass on which useful action can be taken. As an instance I may mention that a deputation is to be received shortly by the Lord Mayor as to the adequate artistic treatment of the new Thames Bridge.

So much of the work of the Committees, and of the Council, is necessarily done in private—since much is confidential—that members know nothing of it, unless it result in some public action. Their most useful efforts, nevertheless, are those which, having quietly succeeded, are no more heard of save for a brief note in the Annual Report of the Council, when they may be no longer of interest save as records. It is, as I have said, impossible to keep members acquainted with all the transactions of the Committees and Council, for premature publication would not

* 9 Jan. 1909, pp. 171–4; 6 March, pp. 317–18.—ED.

† JOURNAL R.I.B.A., 12 June 1909, pp. 525–33.—ED.

‡ Since this Paper was read, the Report of the Parliamentary Committee has been published, and, as will be seen from the extracts given on a later page of this issue, the Committee, by a large majority, recommend that Architecture be placed on the same footing as regards copyright protection as the sister arts of Painting and Sculpture.—ED.

seldom cause miscarriage, but it is worth thought whether the issue of an interim half-yearly Report might not lead to a livelier and closer interest in the proceedings at headquarters.

Town planning is a subject very much " in the air " just now, and the Royal Institute was early in the field with a strong Committee, led by Sir Aston Webb, to deal with its architectural policy. We succeeded after much hard work and an interview with the President of the Local Government Board in securing the insertion in Schedule III. of the new Act of a clause giving to the Royal Institute the right to appear, and make representations, at Local Government Board enquiries on town planning schemes submitted to them by local authorities. We did not get all we wanted, but we got part, and incidentally secured that most important point, official recognition.

To those of us who remember the Royal Institute in 1882—that memorable year of its history when a little band of us affronted the unknown, and presented ourselves for the first entrance examination which had ever been held—the lively growth and corresponding energy which it has developed since that time are nothing short of astonishing. The number of candidates, which is now reckoned in hundreds, was then about equal to that of the Examiners themselves ; and we were all very comfortably accommodated at separate tables in the Reading-room at Conduit Street, very much as the Examiners now are for the Oral Examination, which was then held in the small Committee-room adjoining. This part of the proceeding, by the way, was considerably more trying to the nerves of the victim than now, when it is a matter of private confession between himself and his examiner in any particular subject. He was then admitted alone, like Daniel to the lions' den, and found all the Examiners seated along one side of a long table, on the opposite side of which was placed the candidate, their prey, who was subjected to a running fire of questions. It was rather bewildering, as he could only guess the subject an examiner was taking by the questions he was asked, and the attempt to divine his success from the whispered conferences and solemn head-shaking of those who had already got, or had failed to get, what they wanted from him did not assist him to concentrate his mind on the actual interrogatory.

My own belief is that the Examiners were on that occasion quite as nervous as the candidates ; they had not acquired the case-hardened routine of the present twenty-seven years' experience, and their marking was, I am sure, influenced by compassionate pity rather than by mechanical exactitude, or I should never have attained the degree of Associate. It is a striking instance of the devoted and unflagging work done by certain members of the Institute that the present Chairman of the Examining Board, Mr. John Slater, is one of the original Examiners.

Prodigious progress has been made since those days, when the Royal Institute was little more than a dilettante Society, whose action in professional and public matters, when they took any, was distinguished rather by a discreetly evasive prudence, than by energy. It is now the recognised administrative and governing body of the whole profession, and while at that time its membership was something under 900,* I was startled to find when appointed as its delegate on a recent occasion, that I represented the opinion of 3,626 British architects, to say nothing of 2,293 " Probationers " who have passed the Preliminary, and 961 " Students " who have passed the Intermediate Examination.

Of all the multifarious duties with which it is charged on behalf of the profession, there is none I think in which it has been more successful than in the stimulus to practical training which it has given by its system of examinations. Schools of architecture, which hardly existed before 1882, are now to be counted by the score, and these are now producing architects—not so well finished off perhaps as we could wish—with the efficiency and almost with the rapidity of a sausage-machine. The prospect for the future is somewhat alarming, and the Royal Institute is quite alive to the necessity for taking some order in the matter.

Its first step has been to obtain power to form a Central Board composed of the most eminent

* The membership in 1881-2 was 370 Fellows and 491 Associates = 861 in all.

men in the profession, to control and co-ordinate the whole education and examination of students throughout the kingdom. This Board will come into existence immediately after the Privy Council has given its approval to the By-laws now submitted to it. It will replace the existing Boards of Examiners and of Education, and I have the highest hopes of its usefulness in defining and raising the standard of qualification and thereby putting a check on the flooding of the profession by half-educated men. And, in using the word "qualification," I mean that which is required for membership of the Royal Institute, for I hope that in course of time such membership may come to be universal for all architects qualified to enter it, and a necessary corollary to their training. We have already reached the point where admission to its ranks can only be attained by examination, and when we remark the tremendous strides in the direction I suggest, which I have already brought to your consideration, I think you will see good ground for that hope.

You will say, perhaps, that I am getting very near to the vexed question of what is called "Registration," a word that seems to have different meanings in different mouths, especially when used as a vote-catching cry at Council elections. The fact is that we are all agreed upon a scheme for statutory examinations by the Royal Institute, and I understand that a Bill for Parliament is being drafted by the present Council. I should like to see all public buildings erected and public appointments filled by members of the Institute, and I think that moderate proposals in that direction might be successful. To set up an outside examining body holding the power to grant certificates of competency, even if the Royal Institute were represented upon it, would to my mind be entirely disastrous to us. Men who had been granted their certificate would no longer have any direct interest in passing our own examinations and entering the Royal Institute, which would relapse into its old condition of respectable nonentity. I do not think it practicable, even if it were desirable, to punish incompetent men for designing buildings, but I am entirely in favour of closing the Institute, of strengthening its hands, and of so extending its influence that before long it shall to the public mind imply incompetency not to be counted among its members.

To revert to the new Controlling Board of Examination and Education. The policy of the Royal Institute has always been, and I think wisely, not to undertake actual training, but to advise upon the best methods to be followed, and to examine the results thereof. We have looked back together on a very small fraction of the work already done. May I venture to indicate some points which seem to me desirable in our future efforts?

One matter to which I think the new Board should direct its attention is the shortness of the present school course. Two years—for the second two years in an office is usually spent in practical application of knowledge rather than in organised study—is utterly inadequate as a period of school training. The minimum should be four years, two in the lower school and two in the higher, followed by the two years' office work; or, if the student be sufficiently able, and willing to attempt a higher rank of attainment, by a two years' honours or diploma course on the lines suggested by my friend Sir Brumwell Thomas. And to this end I sincerely trust we may be able to bring to fruition a scheme I have greatly at heart and give to picked students, as the crowning prize of their career, a course of study at Rome. It is but some four years since I first broached this idea on the occasion of Mr. Collcutt's Address to Students, and I have already the satisfaction of sitting on a Committee appointed to consider the practical side of the subject.

A more complete basis of accomplished study and a somewhat riper talent is needed in our travelling students than at present obtains, for, as my friend M. Hulot (whose wonderful drawings of Selinus were exhibited by the Royal Institute last year) writes, "The study of old work (he is speaking of course of classic antiquity) more than any other demands a mental equipment of preliminary study and a somewhat long novitiate—such buildings seldom disclose their whole meaning at the first approach. They fulfilled needs which are no longer ours, and it is only with the knowledge of the customs of a bygone folk that we are enabled to usefully study their monuments."

And in the course of my reading on the subject I came across in that almost prophetically right work " Architecture and Public Buildings," by our former Secretary, Mr. William H. White, the following note, " Unfortunately in too many instances the travelling students fail for want of proper advice and a guiding hand by the way. The number of indiscriminate sketches they make is fabulous, for, as a rule, they are told to ' go sketch,' much in the same fashion as, at the beginning of the century, poor waifs and strays of humanity were dismissed from Houses of Correction with a less benevolent injunction."

Another matter which the new Board will undoubtedly consider as of immediate urgency is the raising of that now far too easily leaped barrier, the Preliminary Examination. It cannot be too much insisted on that a thorough general education—and if on classic lines so much the better—is an absolute necessity to any architect who is to be fully equipped for the profession. The standard is at present so low as to be almost ridiculous, and candidates are thus admitted whose acquirements are so inadequate as to be quite useless as a basis for special studies.

To revert to my pet project for a School at Rome. Having to prepare a memorandum for the use of the Committee to which I have referred, I recently visited at Rome that magnificent " Académie de France à Rome," better known to us as the " Villa Médicis." Its history is a curious one. Founded in the full splendour of the French Monarchy in 1666 by the private munificence of Louis XIV., it was first suppressed by the Revolutionaries in 1793, the year of the Terror, re-established in 1797 by the Republic—which also founded the nucleus of the famous Ecole des Beaux-Arts in 1800, subsequently established in its present quarters by Louis XVIII.—and in 1803 was installed by Napoleon I. in the Palace it still occupies. The first students were painters and sculptors, but in 1720 architects were added, and they have established a traditional standard of work of marvellous excellence. The term of study was five years until 1864, when it was for State reasons of economy reduced as regards the architects, painters, sculptors, and musicians to four years, and for engravers to three years.

There are consequently nineteen " pensionnaires " who dwell together and take their meals at a common table. Their life during the period of their " pension " is wholly given up to their work, and is of almost monastic simplicity. As you may imagine, the return to professional practice every year of a necessarily brilliant man so highly trained and thoroughly imbued with the greatest traditions of his art is of incalculable benefit in keeping a standard of achievement before the eyes of his less fortunate or less gifted brethren. Spain also has an Academy at Rome where excellent work is being done ; and America has now created a similar institution. Germany has either founded or is about to found one for her art students, and it remains, as I hope, for the Royal Institute to lead the way for Great Britain. I should like to say more to you on this topic, but I must not indiscreetly forestall the report of the Committee charged with it.

It is pleasant to be allowed to come here and talk over the affairs which we all have at heart. Communications are rapidly improving in facility, but the Allied Societies are still less closely identified with the central body than is desirable, from the point of view of solid and combined effort for the improvement of our great art, and of the conditions under which it is practised. If, however, the development of the aeroplane continues at the same rate as it has begun, we shall no doubt have to consider the question of a large " garage " at Conduit Street for the benefit of country members, who will be able to fly up from Newcastle at no greater sacrifice of time than that of the Londoner who takes a taxi-cab from Kensington or the City. I hope that, long before then, the proportion of members of the Allied Societies who are also members of the Royal Institute may be greatly increased ; it would very much strengthen the position of their representatives to feel that they had behind them a powerful voting force.

I have dwelt on the practical side of the work of the Royal Institute—though I have indicated but a few of the objects towards which its activities are directed—because I think many

members hardly realise the importance and influence of its support in connection with their every-day business. That British architects in general are respected as an honourable and efficient body of men is largely owing to the high standard set by the members of the Royal Institute, and to the fact that the public realise that they form part of a strong and united guild, with a common code of regulations as to their practice and a genuine desire to do their utmost for those who consult its members or their representatives. The adhesion and loyalty of its members to the Royal Institute reacts upon the public to the mutual benefit of both parties, and to glorify and strengthen the Institute is to strengthen each of its members in a way far exceeding what any policy of selfish private effort can possibly achieve for them.

That the Council do not always accomplish all their endeavours is of course true, but with the increasing support and confidence of the general body of members it has gained power and the respect of public authorities in a way which would have been deemed incredible thirty years ago. This has been brought about by constant, patient labour, and though many failures have to be recorded, the attempts themselves have been so many steps gained in the progress of the Institute. " It is the effort," says Ruskin, " that deserves praise, not the success."

Elections to the Council should be most scrupulously and carefully scrutinised, and every subscribing member should record his vote, remembering that his own personal interest is concerned in the selection of the most fitting candidates. If I may venture on advice, I would say, disregard all suggestions from men of narrow views and ideas ; put upon the Council the very best men in the profession, keep them there, and give them your loyal encouragement and confidence. We must all, I think, have felt hot indignation at the public, and generally anonymous, attacks and poisonous insinuations with regard to the Council which are occasionally allowed to appear in the professional press.

Some difficulty is, I believe, experienced by certain members in filling in their voting papers, as to candidates unknown to them personally and as to whose fitness and qualifications they have no information ; the effect being, that to avoid casting their vote unsatisfactorily, they refrain from voting at all ! I have often thought that one of our enterprising journals might do worse than compile an architectural directory on similar lines to those published for the medical, legal, and clerical professions. The sale ought to be secure, and the matter would be obtained for the cost of postage. A *Who's Who* of architects would be of great service not only to the profession but to a large number of the general public.

In putting before you a view of the Royal Institute, not always kept in mind, with regard to its relation to the conditions of modern architectural practice, I would deprecate any idea that this is its only, or even its principal, reason for existence. The true purport of its being is expressed in the words of its Charter, " for the general advancement of Civil Architecture and for promoting and facilitating the acquirement of the knowledge of the various Arts and Sciences connected therewith, it being an Art esteemed and encouraged in all enlightened nations as tending greatly to promote the domestic convenience of citizens and the public improvement of towns and cities."

The Royal Institute is not a trades union ; it is not a weapon to use against our clients, but rather an instrument to encourage and confirm their confidence in us their advisers. The true question then for its members to ask, and indeed for all architects desiring more than their own selfish ends, is *not* " What has the Institute done for me ? " but, " *What have I done for the Institute ?* " !

TOWN PLANNING.

PAPERS COLLECTED BY THE R.I.B.A. TOWN PLANNING COMMITTEE.

IX. Some Suggestions, by Halsey Ricardo [*F.*].

PARKS.

The laying-out of parks—apart from the consideration of appropriate trees, shrubs, turf, &c.—must be determined from the æsthetic side primarily, and secondly by considerations of the routes of traffic across them. By "æsthetic side" is meant the approaches, vistas, boundary walls, entrance gates, lodges, &c. Such matters must be handled on an intelligible scale and in recognisably definite symmetrical forms.

Considerations of traffic are apt to be put too much in the forefront. Traffic is in a state of incessant development; the points subtended vary (even the entrances to the great railway termini suffer a change); the forms of traffic (tube, omnibus, carriage, cab, and motor-car) have a fluctuating popularity—no forecast of convenient routes is ever likely to prove lasting, even if ever realised—and the breadths of sylvan and grassy spaces should not be intersected by quantities of oblique lines dedicated to people so vulgar as to be in a hurry.

OPEN SPACES.

Open spaces should have definite shapes, and the architecture surrounding them definite skylines. The new buildings of the Quadrant, Regent Street, are being spoilt by the unsightly top hamper that surmounts what should be the proper skyline. Where open spaces occur in busy routes (Piccadilly, Oxford and Ludgate Circuses, for instances) the traffic should not be allowed to intersect them. A centre plot of grass and shrubs (the latter, by preference, in tubs and renewable) should be formed, round which the traffic could circulate without encountering any hindrance or opposition. Colour in open spaces is of the highest importance: witness how valuable are the little strip of green and the fig-trees in front of the National Gallery: they go far to alleviate the arid waste of Trafalgar Square.

PUBLIC MONUMENTS.

Before all things, public monuments require a quiet background, specially reserved and designed for them. To use them as obelisks for dividing the traffic or as indicators to the public latrines beneath them is a hateful misprision of the sculptor's aims and art. Most of our public statues are crying instances of this ill-treatment. The Duke of York's Column and the Albert Memorial are good examples of a better disposition.

If our monuments are to be of bronze, let them be wholly gilded; if it is proposed to make them of stone or marble, order them off the spot at once, unless there is a guarantee that they shall be periodically painted in oil colour.

CITY EXTENSIONS.

The front gardens of houses that line the roads should be under the control of the central body, who should decide upon the laying-out of these, the shrubs, trees, &c., and keep them in order. No garden city at present is owned and controlled by the community: private landowners, the Government at Rosyth, and public utility societies are the controllers of these schemes; no local authority has taken the initiative in the planning of its suburbs. The best attempt is that of Liverpool, which is working in co-operation with the landowners in its suburbs to construct a tree-planted avenue, suitable for fast and slow traffic, from 85 to 104 feet wide, in a huge semicircle round the land side of the city.

Schools and playgrounds for children should be so arranged that the children shall not have to cross the wide busy streets.

The general effect of the back elevations of the buildings should be as much studied as the sides and fronts. A house is not an independent unit, but part of the general scheme; and each unit has to contribute to the general amenity and orderliness of the whole. To some degree this principle is admitted everywhere—in the restrictions, for example, as to drainage, light and air, and protection from fire; but in these co-operative schemes this principle is, or should be, carried much further; for it is of the essence of the scheme that each individual should further the general well-being (æsthetic as well as material) of the larger entity, the garden city commune. Not only in the garden city, or city extension, should the matter of tree-planting be one of great consideration, but the approaches to the city should be through avenues a mile long or more. An example of the immense distinction such planting confers is the city of Dorchester (Dorset); the town is surrounded by a triple avenue of horse-chestnut trees, now grown to forest size, and the approaches to the town have avenues, planted a hundred years ago, of chestnut and elm extending for more than a mile in each direction, making the general impression on approaching this city incomparably beautiful.

Fast traffic should skirt, not go through, a suburb, and the city extensions should be grouped between the radial roads where the traffic is moving at high velocity.

Where local materials are available they should be insisted on: in a stone country, stone; in a brick country, brick houses; and where the houses are built contiguous, in blocks, "terraces," and "crescents," and such architectonic groupings, the repainting of the external woodwork, &c., should be undertaken by the central authority and not left to

the individual to choose his own time and colour. Something should be done to keep in check the enormous drums of the gas companies, which are often so large as to dwarf an entire city and cause it to look ridiculous. Possibly gas may not be the illuminant of the future, still it will always be needed and in quantity; but it might be stored in several reasonably sized containers instead of one that, in the matter of size, would crush even the Roman Pantheon.

DRY ROT IN BUILDINGS.

By Wm. Woodward [*F.*].

"Dry rot" is a fungus which decomposes the fibre of timber and produces rapid decay. It is possible that it arises from germs in the timber itself, and it may have been initiated in its transit to this country in the vessels bringing it. But whatever may be the cause, the result is laid at the door of the architect; and he has suffered heavily, not only in pocket, but in reputation, when tried for negligence in not preventing that over which perhaps he has no control.

It is no part of the mission of the R.I.B.A. to step in to defend architects from the results of their carelessness or of their incompetence, but "dry rot" has appeared in buildings where the architect had, by his drawings and specification, taken every reasonable care to prevent it. I think there can be but little doubt that ventilation of the timbers has much to do with the prevention of "dry rot," and we know that, in certain circumstances, this "ventilation" is easier said than done. Party walls and back walls are, at times, in the way of through ventilation, and front walls only are at our disposal. Then the architect has to see that what outside air he can bring in through his front wall is induced to permeate the entire floor. He has also to see that his instructions are faithfully complied with by the foreman, and that the system he has so carefully thought out is not rendered useless by the ventilators being put in at the wrong levels, or by a total disregard of the lay of the floor-joists, permitting only the space between two joists being ventilated, or only the side of one joist and no chance given to the remainder.

The drawings which I have prepared to accompany these notes are intended only to direct attention to methods which I have adopted, but which other architects may disagree with, and I hope we shall be favoured with the views of those who have in their practice escaped trouble or have fallen into it.

Diagram A shows a basement floor where floor-boards are used. The splayed fillets are embedded in the concrete, which is levelled smooth on the surface, the fillets and concrete being quite flush. The fillets are dipped in tar before laying, and, when dry, the whole of the upper surface of the concrete is coated with hot tar. The floor-boards are then nailed to the fillets. This floor requires no ventilation, and is sound after fifteen years' service. I believe this to be a thoroughly good treatment.

Diagram B shows an ordinary wood floor ventilated by gratings. It will be seen that a "clearance space" is left between the ends of the joists and the wall; this is important, and the space need only be about 1 inch. If the lay of the joist nearest to the ventilators is right across them, then centre-bit holes should be bored in every joist throughout the floor. These holes should be about $1\frac{1}{4}$ or $1\frac{1}{2}$ inch in diameter, and about 2 feet 6 inches or 3 feet apart, arranged top and bottom in triangular form. Properly looked after I believe this to be a good floor to resist "dry rot."

Diagram C.—This shows a "pugged" floor, which frequently causes trouble, but equally frequently does not. The prevention of "sound" does not always result, and the pugging itself wants well looking after. Ordinary lime and hair; sawdust; chopped hay; slag wool; coke breeze, &c., have been used with more or less satisfactory results as regards transmission of "sound," but the worst of the lot, as regards risk of trouble, is, I think, lime and hair. It is mixed frequently with too much water; the hurry of the building demands the laying of the floor-boards too soon, and there is the damp atmosphere; forcible artificial and premature "drying" takes place, the floor covering is laid, the only chance of air through the joints of the floor-boards cut off, and clear invitation to "dry rot" is given and is accepted; with all these disadvantages, some floors escape scot-free, whilst others similarly constructed cause great trouble—(and so it is with smoky chimneys). I believe, however, that if pugged floors were constructed as shown on this drawing, and the lime and hair, if it must be used, given plenty of time to dry and not be saturated with water in the first instance, no "dry rot" would arise; presuming, of course, that it is not already in germ in the timber.

Diagram D shows a floor constructed similar to *C*, but as only slag wool, and not lime pugging, is used, it is not so necessary to ventilate the upper part of the floor.

Diagram E shows a floor constructed in a similar way to *C*, but where there is no opportunity, or where the opportunity has been neglected, of providing ventilators. Even here, however, a chance is given—and only a chance—by the clearance space of the joists, by keeping the pugging away from the under-surface of the floor-boards, and by the open joints of the floor-boards. An architect who constructed a floor like this when he could have provided ventilators would be open to censure.

Diagram F shows a floor similar to *E*, but where, although ventilators have been provided, they only ventilate the lower part of the floor; the upper part is left to take its chance from whatever it may get used, and where floor-boards are required. The lower part of the floor, being of concrete and terra-cotta, does not need ventilation; but the upper part, with the wood bearers and floor-boards, does.



DIAGRAM A.—SOLID WOOD AND CONCRETE FLOOR. NO VENTILATION.

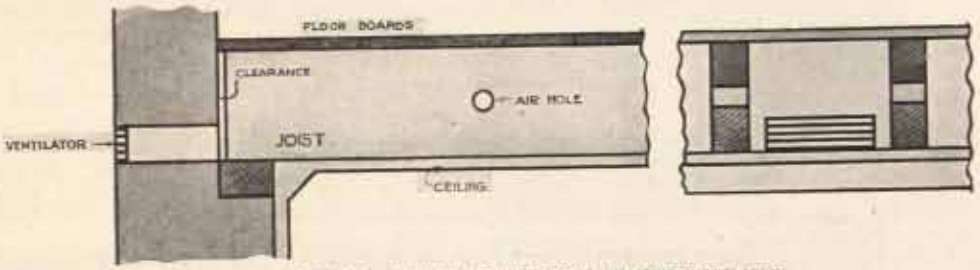


DIAGRAM B.—ORDINARY WOODEN FLOOR, SHOWING VENTILATION.

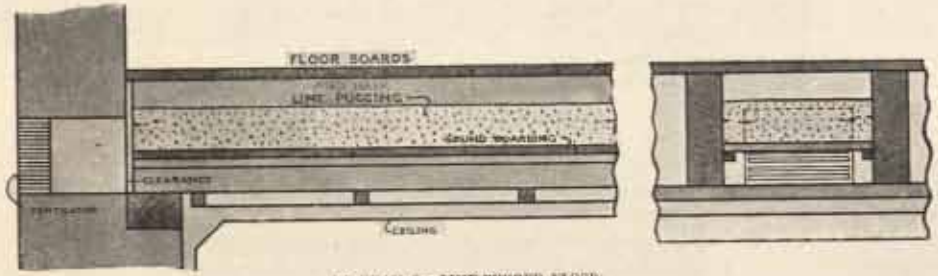


DIAGRAM C.—LIME-PUGGED FLOOR.

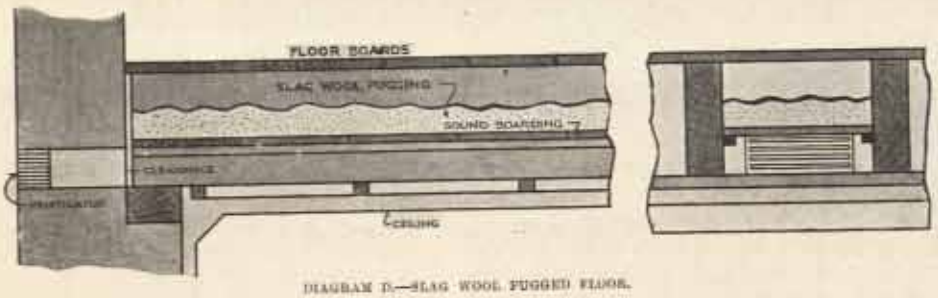


DIAGRAM D.—SLAG WOOL PUGGED FLOOR.

in the way of ventilation from the open joints of the floor-boards.

Diagram G shows a method of construction where "Frazzi," or other of the fireproof floors are Therefore ventilators are provided, and the air permeates the floor and spreads through the notchings over the flanges of the steel joists.

With regard to architects being held immune

from actions at law in consequence of "dry rot" in buildings, it will always be difficult to convince a judge or a jury that such "dry rot" was not preventable. I am afraid that we all, or many of us, have not given sufficient detailed and minute always before them. Assuming that the architect has done all that experience and thought could dictate, he would I think do well to advise his clients, in writing, to abstain, at all events for say two years after the floors are laid, from covering the whole

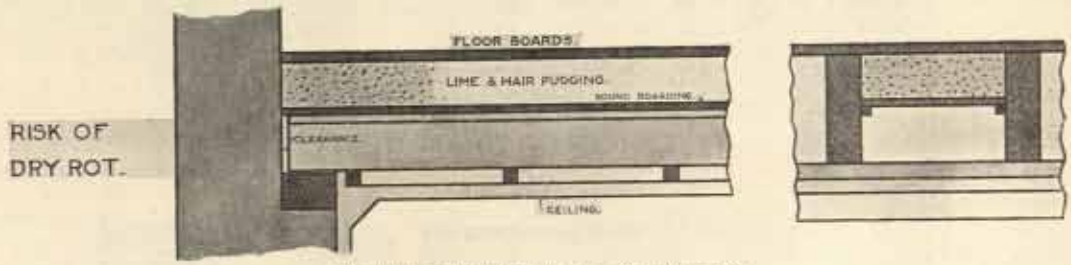


DIAGRAM E.—LIME-PUGGED FLOOR. NO VENTILATION.

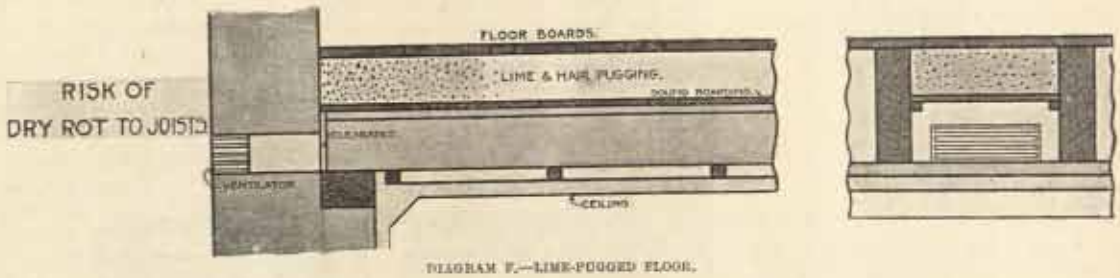


DIAGRAM F.—LIME-PUGGED FLOOR.

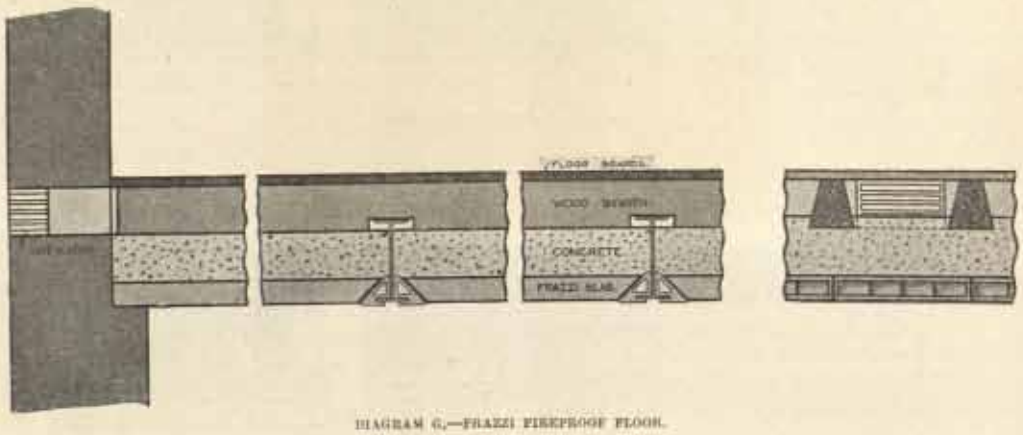


DIAGRAM G.—FRAZZI FIREPROOF FLOOR.

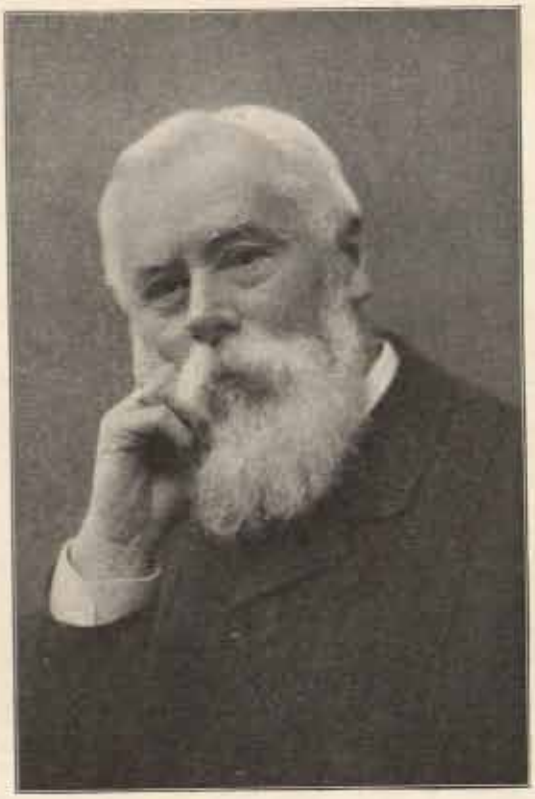
attention to our floors; we have left them to take their chance with the ordinary building works, and we have not seen, perhaps, that the foreman has quite understood the care required to allow ventilation to be spread over the whole floor; that is the secret, and architects would do well to have it surface of them with any material which hermetically seals the boards and joists from the chance they had of the permeation of air, and to warn them that if they disregard his advice, he, the architect, will not be held responsible should "dry rot" occur.

THOMAS WORTHINGTON.

BORN AT SALFORD, 1ST APRIL 1826.
DIED AT ALDERLEY EDGE, 9TH NOVEMBER 1909.

To be in active practice for fifty-eight years does not fall to the lot of many architects; in the late Mr. Worthington's case these years extended over a period which embraced, in his own city (Manchester), the Renaissance treatment of buildings, the change to the Gothic Revival, and the return to a less scholarly adaptation of Renaissance.

Thomas Worthington was educated at Dr. Beards' school, and amongst his contemporaries was the late "Sam" Pope, Q.C. He was articled to the late Henry Bowman, who took into partnership J. S. Crowther; but Worthington was essentially Mr. Bowman's pupil, and when Messrs. Bowman & Crowther undertook the publication of their great work *The Churches of the Middle Ages* he assisted them and had for his colleague the late Edward Salomons.



THE LATE THOMAS WORTHINGTON.

When twenty years of age (in 1846) he was awarded the Institute Silver Medal for an essay; and previously to this, when he was eighteen years of age, he won the Isis Gold Medal given by the Society of Arts for a design for a church. Through his brother, Mr. Samuel Barton Worthington, Engineer to the Lancaster and Carlisle Railway, he became known to, and joined the staff of, Sir William Tite for the building of the Railway Station at Carlisle.

In 1848 Worthington first visited Italy, and remained there some twelve months, during which time he measured, amongst others, the following buildings: at Florence, Strozzi Palace, Pandolfini Palace, Riccardi Palace; at Rome, Borghese Palace, Massimi Palace, Farnese Palace, Giraud Palace.

I have seen his sketch books and his notes taken during this period; they are particularly sincere and truthful studies, all mouldings and features being carefully drawn and figured; there were few attempts at picture making, yet there were some, his efforts having been concentrated mainly upon the collection of useful data, expressed in measured drawings, upon which to create faithful reproductions of the features and mouldings of a scholarly phase of architecture.

It was not known generally amongst the architects in Manchester that Worthington was what might be called addicted to Italian Renaissance, for the works he carried out were mainly if not entirely of a Gothic character, and it is interesting to note that in the majority of his competitions and of his erected buildings he prepared complete alternative designs in the Italian Renaissance style.

Walters, who ceased to practise at the end of 1869, and Gregan, who appears not to have practised after 1862, were the two principal local architects to whom Manchester is indebted for the buildings of the Warehouse and Bank classes in the pure Renaissance treatment, and it is to these buildings no doubt that Fergusson refers with great praise in the introductory part of his *History of Architecture*. Barry had built the Athenæum and the Art Gallery; Professor Cockerell, the Bank of England; Goodwin, the old Town Hall, now the Reference Library; and Irwin, the Theatre Royal: now Worthington, in 1858, built the Overseers' and Churchwardens' Offices in Fountain Street. As would be seen from the illustration of his first design for this building, which was slightly altered in execution, it appears to have been his intention to continue in the style which these men adopted, but unfortunately what may be called the Gothic flood swamped any such intention, and it is to be regretted that this should have been the case. Had Worthington and the pupils of these masters continued, as some of them undoubtedly had the ability to do and as it would appear they wished to do, the course mapped out for them by their predecessors, Manchester would have continued to deserve the praise of Fergusson and would have been, what it ought to have been, a city second to none in respect to the purity of its architecture.

Bowman was a literary man, as were also Walters, Gregan, and the others; but popular "taste" willed that the new Manchester Town Hall should be in the then modern craze, and Worthington's design

for that building was of a Gothic character and was placed second to that of Waterhouse. From this time and the time of the building of the Assize Courts the architecture generally in Manchester has been of a less scholarly character.

Amongst Worthington's works are the following: the Overseers' Offices, Fountain Street, Manchester; the Manchester College, Oxford; Brookfield Church, Gorton; Memorial Fountain to Lord Frederick Cavendish at Bolton Abbey; Royal Infirmary, Halifax; Royal Infirmary, Wigan; Royal Bath Hospital, Harrogate; Chorlton Union and Prestwich Infirmaries; the Convalescent Institution, Liverpool; City Police Courts, Minshull Street, Manchester; Nicholls Hospital, Ardwick; the Albert Memorial, Albert Square, Manchester. (The design for this latter was made within twelve months of the death of the Prince Consort.)

Worthington was always a great believer in educating the young and leaving the seniors to their own devices, for at every opportunity he wrote letters praising any effort made in the former direction. In matters relating to art and architecture in the city of Manchester he was always in evidence: for many years he served on the Council of the School of Art and of the Royal Manchester Institution, of which latter body he was the President and Chairman of Council. Mainly owing to Worthington's personal efforts the Art Gallery was presented by the Royal Manchester Institution to the Manchester Corporation, and he was a representative of the Governors of the Institution on the City Art Gallery Committee from its formation to shortly before his death.

It is of interest to note that the services of Florence Nightingale were always at his disposal, and he found her suggestions and advice of great benefit to him in the planning of his hospitals. He was probably the first to design a hospital in England on the pavilion principle. Worthington was one of the founders of the Manchester Society of Architects, and was the President of that body from 1875 to 1877. He was a Vice-President of the Royal Institute from 1885 to 1889.

PAUL OGDEN [*F.*].

BARON VON GEYMÜLLER.

It is with sincere regret that we have to announce the death of the Baron Henry von Geymüller, of Baden Baden, who was elected a Corresponding Member of the Institute in 1881, contributed many articles to our JOURNAL, and presented us with copies of most of his works. The Baron, who was born in May 1839, devoted his life to the study of the Renaissance in Italy, and published many books on the lives of the great Italian Revivalists of the 15th and 16th centuries and their works. His first book, and one by which he is best known in this country, was brought out in 1878–81; it contained reproductions of the original designs for the Basilica of St. Peter's in Rome, illustrated in a folio volume, with descriptive text. This led to a much more important work, an atlas folio on the Architecture of the Renaissance in Tuscany, in which he was assisted by other German architects. The work contained fine engravings of the principal churches and palaces of the Renaissance, photogravures and reproductions of ancient plans and other documents in various libraries. Of this, we possess in the Institute Library only the two first parts, published in 1885 and 1888 respectively. In a letter I received from the Baron in May last I understand that this work, which was to consist of thirty parts, is now completed. In 1884 he published a folio volume on Raphael as an architect, with numerous reproductions from ancient drawings; and in 1887 a quarto volume, well illustrated, on the Du Cerceau family. Both of these are in our Library, as also the two volumes which he contributed to the very large and comprehensive German publication, *Handbuch der Architektur*, entitled *Die Architektur der Renaissance in Toscana*, 1885–8. A third volume on palaces was in progress, but, as the Baron in his letter suggests that "it might be ready in a year and a half," it will have now to be completed by some one else. In this letter he writes: "I have come now to an age when it is uncertain whether God will allow me to take up the studies which I have been preparing all my life, *i.e.*, the large monograph on Bramante and a second volume of the original designs for St. Peter's." He continues: "If I had the means of paying two architects and two historians of art there might be a better chance of completing those two works; and if I had two more architects, I might include Leonardo de Vinci as an architect and Fra Giocondo too." In this letter he deplores the isolation in which he is placed in his home at Baden Baden, "where there are no fellow architects studying in the same direction," and that he has "not the same resources of instruction which he would have in cities like Rome, London, or Paris." The Italian architect to whom he was most devoted was Bramante, and he spent many years of research in the various libraries of Europe in the hopes of finding examples of his original drawings. About seventeen years ago he visited London, and in the Soane Museum was delighted to find an album of drawings on parchment which he attributed to Bramante, and there was no greater expert on the subject than the Baron. He was also a very great linguist, and not only that, for he wrote equally well in four languages. His communications to the Institute were always in English, the text of his works on St. Peter's and on Raphael is in Italian, on the Du Cerceau family in French, and his work for the *Handbuch der Architektur* is naturally written in German. I had the privilege some twenty years ago of introducing him to Sir Frederick (after-

wards Lord) Leighton on a memorable occasion: the Baron had expressed a wish to see some of the finer examples of English modern work, and accordingly I arranged to take him through the City on a Saturday afternoon. The City was pretty well empty, and on coming down Threadneedle Street towards the Bank we saw on the edge of the pavement, with a carriage close by, an isolated figure with folded arms, wrapt in contemplation of a building opposite. The building was the Sun Fire Office before its restoration, and the isolated figure was the President of the Royal Academy, who had driven into the City on this Saturday afternoon to study Professor Cockerell's great work. It was many years since I had heard from the Baron, but happening by chance to be informed that he would on a certain day in May last celebrate the seventieth anniversary of his birth, I wrote off at once to congratulate him on the auspicious event, and in answer received a long letter from which I have just quoted. His loss will be deeply felt by all those who have profited by his great researches, and it is distressing to think that he has not been able to reach the results of his first inspiration, viz., the monograph on Bramante.

R. Phené Spiers [*F.*].

THE LATE HENRY HALL [p. 121].

Before me hangs a photograph of our old chambers in Duke Street, Adelphi, which were demolished in 1877, on the first floor of which the late Mr. Hall had his offices, and where, in his bachelor days, he also resided. In the late sixties I knew him well as a friend and neighbour, and was then able to give him occasional help. We often talked of our family histories, and he, as a Northamptonshire man, as my father was, was fond of discussing his early and family connection with that county. Mr. Hall possessed a comparatively small but distinguished *clientèle*, and I can speak warmly in praise of his diligence and care over all matters in their service with which he was entrusted, as also of his genuine and unostentatious character. He was one among many of his time and our own who are content to labour on in quiet effort without the notoriety or notice which he deserved but never sought, and to do good honest work to the best of his ability, and that was very far above the average. Such a career has its lessons, and displays that devotion to duty which many more favoured but less worthy than he may take to heart. The loss of his wife, who lived but a few years after their union, was a sad blow to his happiness. He died at a ripe old age, and few who survive him have more pleasant recollections of him than myself. The late W. Medlycott Duke, whose early death caused a great loss to our art, was a pupil of his; another, Mr. S. Wall, is still with us.

E. Swinfen Harris [*F.*].

REVIEWS.

MEDIÆVAL ARCHITECTURE.

Mediæval Architecture. By A. Kingsley Porter. 2 vols. 8o. Vol. I., pp. xviii. 482. Vol. II., pp. xi. 499. 289 illustrations. Price £3 3s. net. [Baker & Taylor, New York, and Batsford, London.]

Mr. Porter has, to a considerable extent, taken M. Enlart's *Manuel d'Archéologie Française* as his guide, and from an archæological standpoint he could not have chosen a better, but his treatment is more extended in one sense, and in another more limited. His title is "Mediæval Architecture," but he deals only with early Romanesque in most countries up to *c.* 1000 (Carolingian); Romanesque in Lombardy, Normandy, Ile de France, and the districts immediately adjoining; Gothic Architecture of the North of France (*c.* 1180–1375), and Flamboyant. In Vol. I. there are also introductory chapters on Greek, Roman, Early Christian, and Byzantine. These early chapters are the least satisfactory, and the short account of Greek and Roman work might with advantage have been omitted altogether. It is not until we come to "Carolingian" that the author seems to be at home.

Mr. Porter's method is to give an historical account of each different style or period in turn, and to follow each by a separate chapter devoted to detailed descriptions of existing "Monuments." In each volume are also extensive Bibliographies, and Bibliographical Index and General Index. These and the descriptions account for more than half the contents; and consequently only 455 pages out of 991 are devoted to historical development and to the causes that advanced or retarded it.

To what extent the descriptions are the result of personal research, and how much is taken from books, is somewhat difficult to determine. The greater part of the description of St. Pierre, Vienne, is an almost literal translation from M. Enlart's *Manuel* (Vol. I., p. 163), but it is only fair to add that in this and in other cases the author quotes his authority. Some buildings of considerable interest, however, receive but scant notice. Thus, St. Bénigne, Dijon—by a printer's slip spelt St. Bénique—is merely referred to in a foot-note amongst other churches where "Carolingian remains may be found."

One of the best chapters deals with Romanesque work in Normandy, but Romanesque in England should have been treated at the same time, in order to give a true account of Norman architecture. Some French and American writers try to belittle this, and trace all development, early as well as late, from the Ile de France. Mr. Porter does not fall into this error. He gives the Normans full credit for their work as pioneers in Western Europe, stating that the germ of their architecture came from Lombardy, and not from the Ile de France at all. As he says, the 11th century—the second

half of which was the great period in Normandy—in the Ile de France was "an age of lawless feudalism . . . . of the degradation of the Church . . . . when the powerlessness of the Capetian monarch reduced the land to practical anarchy." Realising this, and stating also, as he does, that at this period most of the finest churches in France were to be found in Normandy and in the south, it is, I think, a very great pity that he treats the southern churches so superficially. He says it is necessary to consider them, but does so merely in a few pages. I cannot but feel that it would have added greatly to the value of his work if he had dealt with the early churches in Auvergne, Burgundy, Aquitaine, and Anjou as carefully and thoroughly as he has treated those of Normandy. Then all the different schools in France which did pioneer work would have been adequately represented, and the reader could have seen at a glance how each helped towards the great culmination in the Ile de France at the end of the 12th century. Mr. Porter, in his preface, expresses the hope that "circumstances may some day permit me to supplement the present volumes with others dealing with those styles which I have here left untouched." When that happens I hope the styles will be those of Southern France.

The chapter on the "culmination" opens with a delightful quotation from the Abbé Sugar, commencing, "When the house of God, many-coloured as the radiance of precious stones, called me from the cares of this world," and ending, "And I was accustomed to ask travellers returning from Jerusalem, those who had seen the riches of Constantinople and the splendours of Hagia Sophia, whether these marvels surpassed S. Denis." That shows the right spirit for a builder; and the description "many-coloured as the radiance of precious stones" places before one with the utmost vividness what the interior of the house of God was like in the Middle Ages.

Both this chapter and the preceding one contain a very great deal that is interesting historically. Mr. Porter combats the generally accepted belief that the enormous advance in church building which took place in France towards the end of the 12th century was due to the cordial relationship between clergy and people. He says that at some few places, "at Chartres, St. Denis, and elsewhere," there seems to have been accord between the people and the clerks, but that such was far from being the general case; further that "the brotherly love of those two powers, walking hand in hand, as it were, across the centuries . . . . this ideal picture so charmingly painted by Viollet-le-Duc and other writers, is based on imagination, not on historical fact." In support of this he quotes riots between the two parties at Le Mans, St. Quentin, Beauvais, Laon, Amiens, Sens, Orleans, Rouen, Reims, &c. The majority he refers to are prior to 1150, although some are later, but he adds that "the annals of the XII. and XIII. centuries relate an endless number of such broils." I am somewhat sceptical as to whether it necessarily follows that these broils are proof of continued bad blood. A 18th-century man felt that life was not worth living unless he tried to end it occasionally, as a modern Irishman might say. Still Mr. Porter has his facts marshalled and he may be right. His remarks about the "carts cult," as he calls it—*i.e.* the custom of men harnessing themselves to carts to draw the stones for church-building—are very interesting, but are too long to quote.

To summarise these two volumes: they contain an enormous amount of interesting historical matter, much of which, so far as I know, is not contained in any other book written in English; the architectural descriptions of buildings, so far as one can judge from a hasty reading, are carefully compiled; development in architecture is well traced over the limited periods with which the author mainly treats; outside these periods he is not so reliable; the illustrations are chiefly numerous, well-selected photographs, beautifully reproduced, as they always are in American publications, and reproductions from books. The author's own illustrations are, with a few exceptions, unsatisfactory. The Bibliographies are very complete. The work is hardly one for junior students; for senior students, especially those who cannot read French and German, it should prove of considerable value.

The statements I have noted as errors are few and unimportant, but I do not think Mr. Porter will bear me malice for bringing them to his notice. The Romans altered the Greek Ionic by "bending out all four corners," *i.e.* all four volutes, "of all the capitals" is a common mistake, disproved by the temple of Fortuna Virilis (of which the author gives an illustration), the Theatre of Marcellus, the Colosseum, and by numerous capitals with straight volutes in museums in Italy. Moreover, the Greeks curved all volutes much more than is generally supposed. To say that the basilicas of Italy are "built entirely of pilfered materials . . . . can rarely boast of even a single moulding newly cut,' is to ignore entirely the basilican churches of Ravenna. "The Abbey church should always be distinguished from the Cathedral church" does not hold good in England and Germany. The transverse arches at Sta. Pressada, Rome, do not "antedate any in the Lombard School"; they are manifestly additions, and, according to Cattaneo, belong to a restoration made in the 12th or following century. Again, the statement that the transverse arches across the nave of St. Zeno, Verona, were "never constructed" is open to question. One transverse arch exists at the extreme west end, and the capitals remain for the others. The arches were probably removed when the present roof was added in the 14th century.

"Almost every French cathedral was intended to have seven towers, all crowned with spires," is rather too sweeping a generalisation. Few large French churches, outside Normandy, were designed for a central tower over the crossing; Laon Cathedral, which the author quotes as his example, being one of the few. Chartres Cathedral had eight towers, but not a central one. Transeptal towers were never contemplated at Amiens, Notre-Dame, Paris, Bourges, etc., and these cathedrals have only two western ones. In the South of France, moreover, no elaborate grouping of towers was ever attempted. F. M. SIMPSON [*F.*].

MODERN SWISS ARCHITECTURE.

Villas et Maisons de Campagne en Suisse. With 630 *illustrations. By Henry Baudin, Architect.* 4o. *Geneva & Paris* 1909. [*Librairie Kündig, 6, rue Saint-Ours, Geneva; H. Gaulon et Cie., 39 Rue Madame, Paris.*]

Under the influence of changing conditions of life during the last fifteen years in Switzerland, as in other parts of the Continent, there has been a marked exodus of the urban population to the country. The vulgar and soulless block of speculative commercial flats is giving place to a type of house that M. Baudin terms the *maison familiale*, expressing in its architecture something of the individuality of the owner. In other words, Switzerland is now beginning to regain the advantage, both hygienic and æsthetic, of every family occupying its separate house and garden, an advantage which England alone has never entirely lost. In criticising the domestic architecture of our Continental neighbours we are sometimes inclined to overlook this fundamental reason for the poverty of design so often displayed. The Swiss architect of the past half-century has had but little practice in domestic architecture compared with his more fortunate English *confrère*, and his efforts have been rather directed to the huge hotels and commercial buildings that are to be found even in the most distant Alpine village. The series of photographs and plans that have been collected by M. Henry Baudin may be said to well represent the type of villa that is now springing up in hundreds round the great commercial centres of Bâle, Zürich, and Lucerne. They vary little in their plan. The dining-room, morning room, and salon always *en suite* is a system that leaves much to be desired from the point of view of privacy. The planning of the kitchen and service parts of the average villa appear to be always on the small scale; even in the larger villas a servants' hall is rarely to be met with; but, on the other hand, the Swiss kitchen is often more convenient than ours, owing to the range being placed well away from the wall, accessible on all sides, and the houses are certainly more sensibly heated. Another feature that we might well imitate in our smaller suburban villas is the use of the attic space as a drying room. As regards the exteriors of these villas, there is plenty of evidence in the designs in M. Baudin's book that the older tradition is beginning to be studied by the modern Swiss architects; but there seems to be a want of sympathy for the old work and a failure to realise that *l'art nouveau* cannot be successfully applied to the best traditions of the seventeenth and eighteenth centuries. Fortunately there is no lack of beautiful examples of domestic architecture in many an out-of-the-way Swiss village, and if only the rising school of architects will set themselves to study these more carefully, and endeavour to get rid of the cast-iron feeling that now characterises the Swiss villa, the ever increasing demand for private houses will provide opportunity in plenty for the development of a national domestic architecture. It is most encouraging to see that the Christmas-tree effects and stucco rockeries that have hitherto constituted the Swiss private garden seem destined to give place to more formal types in which the garden is more properly considered in its relation to the house. H. INIGO TRIGGS [*A.*].

MODERN INDIAN ARCHITECTURE.

Government of India: Building designs. By James Ransome [*F.*]. *Issued by the Government of India*, 1909.

This book consists of some 60 plates of plans, photos, and perspective views, of Government buildings designed under the advice of Mr. James Ransome during the period when he held the office of consulting architect to the Government of India from 1903 to 1907. It is issued by the Government in the belief that the various designs may prove of service to others engaged in contributing directly or indirectly to the architecture of this country. As more than a year has elapsed since Mr. Ransome's connection with the Government of India appears to have been severed, and there must have been, at the same rate of production, some dozen buildings of importance designed, one feels curious to know who has designed them and how far this belief has been verified.

The book is admirably got up. The perspectives are accurately drawn and vigorously toned. The plans are not quite so satisfactory, no scale is attached to any of them, and out of twenty-three plans four only carry dimensions and only nine exhibit the north point.

Architecturally speaking, the designs attain a high standard of excellence, and one lays down the book after perusal with a feeling of gratitude to the man or men who had the courage to break through the official circle which surrounds the powers that be in India, and a still more lively feeling of gratitude that the selection of an architect for this work fell on one who has shown himself capable of grasping the problems of modern Indian architecture, and keen to meet those problems in an honest straightforward way.

When after the Mutiny of 1857 the Crown took over the Government of India, Calcutta was a city of (plaster) palaces, Bombay a city of (plaster) bungalows, and Madras (Blacktown) a city of (plaster) streets. All public buildings at that time were constructed on the lines of standard designs, in brick, plastered. It will readily be conjectured that the only difference between classic and Gothic was confined to the forms of the openings.

The railway engineers introduced a much better class of brickwork, and about the same time one or two men turned their attention to native architecture and introduced in a tentative way native forms and details. This movement, though for a time swamped by the great Gothic invasion, never quite died out, and is continued in many of the buildings illustrated in the book under review.

When the American war broke out, Bombay rose to the position of a city of great wealth, and, much to her credit, she spent large sums of money in beautifying the city. Gothic being the reigning style in England, Gothic was imported into Bombay. Cunning British architects took up their residence in the city, and many costly and beautiful buildings were erected. Though this movement, as before stated, retarded the advance towards a style suited to the country, the general public began to perceive, in a dim sort of way, that architectural ornament in itself did not constitute a style, that an ordinary building hidden behind a cage of Gothic columns and arches did not possess the dignity associated with this style, and, although many praiseworthy efforts were made to acclimatise the alien, there is in all probability, at the present moment, not one building being erected in India in this style. Even the designs for the Gothic churches illustrated in this book hardly go beyond adaptations, although this is, perhaps, from one point of view, the highest praise which can be bestowed on them.

It was inevitable that, when the native styles generally found favour with the public, wholesale copying should have been resorted to, and the highest praise meted out by an unthinking public to him who copied old work with the greatest exactitude! Did we not do the same here in England towards the close of the Gothic revival; and will it not be always the case so long as mere fashion rules out evolutionary thought? In consequence of this excessive purity, we have, in various parts of India, hospitals, banks, museums, and railway stations looking a little more like Indian palaces, mosques, temples, and mahals than might be desirable; but Mr. Ransome's clever handling of style, both classic and native, must surely have sounded the death knell of all such work. It is hardly possible to think that the simple and vigorous treatment shown in such buildings as the Residency at Bushire (plate XXII) and the block of offices (plate XX), in both of which the *spirit* of the native style is preserved without useless adjuncts or lavish ornament, could ever again lapse into the feeble nothingness of copying, however commendable and pure that copying might be. It is the hidden spirit which gives character to all work, and the recognition of this character which determines its place in art work. A more lengthened residence in the country and a wider field of study would doubtless have strengthened and purified Mr. Ransome's perception of native feeling for its own characteristic forms.

In his adaptations of Classical and Renaissance architecture Mr. Ransome shows a distinct advance on anything done before in India. Government House, Dacca (plate II), is finely conceived. The Agricultural College, Poona (plate IV), would be a noble building in any part of the world. In this design Mr. Ransome has taken advantage of the condition that no building north of the Tropic of Cancer, whose axis lies parallel with the sun's path, need have verandas on the north side, an important point frequently overlooked by architects in India. The Government Offices, Council House Street, Calcutta (plate III), carries unity dangerously near to monotony, but the position is saved by the dignity of its extent and grandeur. It is somewhat disappointing to find harnessed to this design that timeworn monstrosity, that expression of mental poverty, that "triangular thing called a tympanum," asserting itself as a crowning joy and beauty to the building. It finds, alas! a like position in important public buildings much nearer home!

The publication of this book should amply repay the Government of India by minimising those costly experiments in style which abound in Calcutta and other cities in India, for in no other way than along the lines here indicated will the architectural problems of India be met. Too frequently these are set aside for a consideration of style only, a proceeding which betrays ignorance of the first principles of art. Every attempt to foster or to develop a particular style in a country so vast must end in failure. India extends roughly through four-and-twenty degrees of latitude—say, from the south of Italy in Europe to Archangel in the north. Its towns vary in altitude from a few feet above sea level to eight thousand feet, its rainfall from a few inches to 120 inches, its humidity from a dry heat which cracks every article of furniture to a moist heat which melts the best glue, and the races which inhabit the country differ from each other as much as the various peoples of Europe. The real problem is planning to meet the various requirements economically and intelligently; after this is done, then, and then only, should style be considered; and in this connection it ought not to be forgotten that the only character which any work in India possesses is the result of the actual labourer's impressed thought. This character will manifest itself whether we wish it or not. In many localities where art traditions linger it should be reckoned with as Mr. Ransome has reckoned with it.

R. F. Chisholm [*F.*].



9 Conduit Street, London, W., *8th January* 1910.

CHRONICLE.

BUSINESS GENERAL MEETING, 3rd JAN.

Mr Nield's Motion.

At the Business Meeting of Monday, 3rd January, Mr. James S. Gibson, *Vice-President*, in the Chair, the official business having been disposed of, Mr. Geo. Ernest Nield [*F.*] was called upon to bring forward the matters standing against his name on the notice-paper—viz.:

> To discuss the matters referred to in items Nos. 1, 2, 3, and 4, standing in Mr. Woodward's name on the notice of the Meeting dated 20th November last, and to move the following resolution:—In view of the facts before the Meeting to-night, arising as they do out of the matters introduced by Mr. Wm. Woodward, this Institute feels that an injustice has been done one of its old members in a Minute of Censure entered at the Meeting of the 18th May 1908 for making a statement in a circular [a method since adopted by the Council], and directs that such Minute of Censure shall be expunged.

The matters in question were as follows:—

(1) The London County Council's General Powers Bill 1909, and the note thereon on p. 643 of the Journal for 24th July 1909.
(2) Architects' Responsibility in connection with dry-rot in buildings.
(3) The necessity of Assessors in Competitions adhering, strictly, to the cost limits laid down by Promoters.
(4) The advertisements of "Stores" and other Firms as regards the employment of establishment Architects.

Mr. Geo. Ernest Nield: I should like to mention that at the last meeting a motion was brought forward that reporters should be admitted to these meetings, and that motion was not carried. To my surprise I found that in the next issue of one of the professional journals the meeting was partly reported. May I ask that my remarks this evening be not reported in the professional Press? It is now sixteen years since I became a member of the Institute, and, having hitherto taken no part in any of its discussions, I consider that the matter I have to place before you to-night entitles me to a patient hearing. It is with considerable hesitation that I express any views here, for fear of making confusion worse confounded. It has always been borne in upon me that this assembly is a whirlpool of conflicting opinions and, to some extent, conflicting interests. The feelings of pleasure with which I entered the Institute turned to dismay, and later to indignation, at the sins of omission and commission perpetrated by the elected body of management. But to-night I have to give them my support on the first item—namely, their action in opposing the London County Council General Powers Bill 1909, in order to make it more workable. I do not propose to follow Mr. Woodward through his criticism of the Institute's action with regard to the Bill; it has now become an Act, and as such must continue until amended; but I am glad to note that he thinks some benefit resulted from the money expended. If the only result of an expenditure of £506 was to give more discretionary power to the district surveyors, with an appeal to any tribunal other than the London County Council, then I consider the money was well and rightly expended. The district surveyors should be encouraged to administer the spirit and not the letter of the Acts. The great difficulty is that officials of all kinds either cannot or will not administer technical Acts other than in the letter. I had a case in my own experience very many years ago where it was necessary to give notice to the London County Council under the Factory Act, and that was done; it was also necessary to give them notice under the Building Act, and that was done. Plans were supplied to both offices—though of course one body—and the consents came through subject to each other Committee. Thinking that now everything was in order, I commenced to carry out the work, but the district surveyor appeared on the scene and told me that what I was doing was quite illegal. The result was that I was prevented from doing precisely what the London County Council had given me permission to do. Things of this kind are very harassing to us all, and they occur not only in the City of London, but in the suburbs as well. Only to-day I interviewed one of the Borough Councils because the plans I had submitted were not approved by them. The place with which I was concerned was built some thirty years ago, and, having their By-laws dated 1908, I thought I had got all the information; but I found almost at the end of their by-laws, tucked away in a corner, that a building that was altered to some slight extent was subject to the by-laws in force at the time it was erected. No fault could be found with the work, but when I saw the officials to-day, to my surprise they brought forward an Act which had been passed a year or two before these by-laws were passed, which gave them power to make any building of which any wall or part of the roof was raised an entirely new building, and subject to the new by-laws. The result was that certain things have to be done to satisfy the consciences of the officials, but the building is not in any degree improved, and might very well have been passed as first submitted. Those are points upon which I consider the Institute should take action, and I do not consider that money could be more fittingly applied than to such a purpose. In the report of the proceedings in the House of Commons upon the General Powers Bill, I notice that notwithstanding the expenditure we were put to in the employment of counsel, the vice-chairman of the Board of Examiners (Mr. Searles Wood) appeared as a witness on behalf of the London County Council. How does this come about? Mr. Woodward, who is a member of the Practice Committee, and who logically should support the action of the governing body, delights in the fact that his remarks in May last were quoted to the House of Commons Committee and used by the promoters of the Bill against the Institute. Mr. Woodward suggests in his criticism of the Annual Report in May last that we should accept the appeal from the district

surveyor to the London County Council. I consider the arbitrary action of the London County Council in the past is largely responsible for the depreciation of property within the area of the county of London. I consider that if the whole £6,467 derived last year from subscriptions of members of the Institute were necessary to oppose improper and undigested legislation, it could not be more fittingly appropriated. Further, I am sure it would receive the unqualified approval of 2,000 out of the 2,278 subscribing members. The action of the London County Council is exciting the attention of public men. Sir Edward Clarke, speaking on the 20th of last month, said that the London County Council ran the risk of allowing matters to pass into the hands of its executive officers. I have heard the same opinion expressed by those who have held high permanent office in the Government of this country. There are some officials who are ever seeking to increase their own personal power, and whether it is done with good intent or not, it may subsequently be so used as to become a menace to the occupier and owner of property. You can imagine a case arising, if there is to be no appeal from the London County Council, where the Council would say, "We will allow your steel construction provided that the building is faced with Portland stone and the elevation is approved by us." I suggest that if there is no appeal to any scientific body like the tribunal of appeal there is no limit to the extent to which they will go. I confess that I cannot understand Mr. Woodward's delight that his remarks on the Annual Report were cited by the London County Council against this Institute. It is an apt illustration, if any is now required, that these proceedings should not be reported to others than members. The latter should have sufficient *esprit de corps* not to make use of it for their own ends, as was done in this instance. It has been contended in the circular I shall presently refer to "that officials should have no place on the Council or Committees of this Institute," and in expressing this opinion I do so for the majority of the members of this body. Coming to Item 2 on the agenda paper, I do not propose to proceed with this, as Mr. Woodward has given notice to re-introduce the subject, but I shall show you at a later stage that there are certain things occurring within this Institute which are in the nature of dry rot. With regard to Item 3, the Secretary has issued a supplementary notice introducing the revised Regulations for Architectural Competitions, and I feel that I am in duty bound to leave this matter in the hands of those who have so long looked forward to the production of these regulations. As to Item 4, "The advertisements of 'Stores' and other firms as regards the employment of establishment architects," that is a matter which calls for some immediate action on the part of this Institute, it being one of its duties to protect its members and to raise the standard of architecture in the eyes of the public. The public do not realise any difference between the members of this Institute and the Stores, except that it is more convenient to have the architectural charges, the building, and the furnishing account in one item. Not many days ago I met a man who is connected with one of these Stores, and in the course of conversation he led up to professional matters and said, "There is a man raising a question of ancient lights in connection with a building we are putting up. What shall I do about it? Shall I tell him to go—somewhere?" I merely mention that to show the extent of knowledge that many of these "Stores" people possess in matters connected with building. I have not the least doubt that the matter will end in litigation. Do you think the public and the client will be able to discriminate between these "Stores" architects and members of the Institute? I have another case in my mind—a house built by a "Stores" firm in the heart of the country and upon which a great many thousands had been spent. One has only to look at the place to see that these people have gone to a person who has some knowledge of architecture, for some of the details are excellent; but, having got a design from him, they have evidently set to work to alter it to satisfy the client, with the result that other parts of the building are most incongruous and very badly designed. How, then, can we hope to make headway against these Stores if they are actually assisted not only by members of the profession, not only by members of the Institute, but by persons who are elected on its Committees? I approach this matter with some trepidation. I shall name no names, and I trust no one present will identify any individual. As the facts I am about to mention have been dealt with by the Council, I trust I shall at once be corrected if I make any inaccurate statement. It is my unpleasant duty to read to this meeting parts of a trade notice issued by a furnishing firm which gives an advertisement to a prominent member of one of the Committees of this Institute. This circular commences in a manner which shows that it was written by some one with a knowledge of building. It speaks of a level site as the cheapest to build on; it speaks of the higher the site the healthier, that a site that slopes to the south or west is preferable, and that gravel is the best subsoil, and so on. Then it goes on to suggest that an architect shall visit the site, and then introduces the following paragraph, which caused to a large extent the circular complained of: "Garden cities notwithstanding, the £150 cottage is not yet, whatever may be in store for us in the future. However, we have to live in the present, and failing the possibility of obtaining a cottage for £150 that will comply with the Building By-laws and that will not cost a small fortune for its up-keep, the question naturally forces itself upon us as to at what cost it is possible to produce a substantially built cottage with a reasonable amount of accommodation. To arrive at a satisfactory answer to this question we consulted a well-known West End architect . . . . who has concentrated his skill upon designing a simple bungalow cottage, costing £200 to build, and this, it may readily be believed, entailed as much careful thought and skill in the planning as a house costing six times the money, for in this case every detail had to be studied, so that not a penny might be spent unnecessarily or anything essential be omitted for the sake of what would have been but false economy." Now, I appeal to this meeting. What does it think of that? I should be very sorry to have my name attached to it. I need not read any more of the circular; but we find a plan showing this four-roomed cottage, and the plan is signed by a member of the Institute, with the letters "F.R.I.B.A." I feel, gentlemen, you will hardly believe me. Then we turn to the next page, and we find catalogued an eight-day clock for 15s. 9*d*., an easy chair for 10s. 6*d*., and a long list of other things. If that were the only thing in this book one might imagine that perhaps it had got in by mistake, but coming to the next chapter we find there the same thing again: "This cottage has been specially designed for us by Mr.———, F.R.I.B.A., to meet the demand for a Week-end Cottage especially suitable for the Riverside or Golf Links," &c.,&c.—there are other things of the same kind—"Estimated cost to build, £230 to £250"; then follows the plan, signed by the said member; and then we come again to the furniture. Following that we come to a further plan for a £450 cottage; and so on till we get to the end of the book, where there are plans for houses costing from £2,000 to £2,300.

Mr. William Flockhart [*F.*]: May we hear the name? That is published, I presume.

Mr. W. Henry White [*F.*]: There is no secret about it at all. The name is my name.

Mr. Nield: It was quite unnecessary to mention the name. I think that the gross injustice which has been done to a member of this Institute by the Council in passing a Minute of Censure compels one to bring forward every matter, in order that justice may be done to him by the

Institute itself. I am afraid there is no alternative but to read through this circular. It is dated May 1908, is marked "Private and Confidential—for Members only," and reads as follows:—

"The time has again arrived for the election of the Council and the various Committees, and members of the Institute probably do not realise that the names of nearly half the present Practice Committee have appeared in the Calendar for eight consecutive years; but, doing so, they will be of opinion that the time has now arrived when fresh members should be elected.

"To architects of London in practice, like myself, the difficulties of dealing with the various bodies who administer the Acts and By-laws relating to and connected with building form a daily worry. It is also a recognised fact that the country is suffering from excessive legislation of this character, which has to a large extent paralysed building operations, and we are promised further legislation by the President of the Local Government Board.

"It is the duty of the Practice Committee to deal with all Bills brought before Parliament, and, where thought advisable in the interests of the public and the profession, to take action in the matter, and to endeavour to mitigate any hardships which may be inflicted upon the owners of property, and to modify unworkable provisions.

"This work was carefully executed by the Committee when the County Council produced their excessive Bill in 1905—only a tenth part of which was carried through Parliament. On this occasion the R.I.B.A. did excellent work at considerable cost, but, as a result, the decision was come to not to oppose any further Bills. Whether this decision was arrived at by reason of the cost, or whether it was the result of official representation upon the Practice Committee, we have no means of knowing, but although the former cause was given I think the latter the chief one. I feel that you will agree with me that the R.I.B.A. should be untiring in its efforts to oppose extreme legislation, and that no sum is more satisfactorily expended than that which is so applied.

"On examination of the members of the existing Practice Committee, I find that they include the Superintending Architect of the London County Council, and no fewer than four official surveyors, so that it must be apparent to everyone that instead of the Committee being free to act independently in the interests of the public and profession, it must be largely influenced by official dictation and by a policy which does not always synchronise with public and professional interests.

"Who after any length of practice has not found that an application to the London County Council (and frequently to other bodies) is only granted where some concession is extorted from the owner, which strictly a public body has no right to demand; and consent to the application is only given subject to this sacrifice, generally made without complaint, not because the owner approves it, but because he finds it better to accept the evils that he knows of than to risk the cost of an appeal, should such be open to him?

"It is a matter of common knowledge that officialism at the present time has reached to such an extent that it is well-nigh intolerable. The District Surveyors appointed under the Act of 1855 had a considerable amount of licence, and I believe they used it fairly, and did then the good work which we seem to think has only been done lately. The District Surveyors recently appointed are bound hand and foot to the Council, whose arrogance, through the action of its executive officers in the carrying out of the Council's behests, compels the District Surveyors to enforce the letter of the Act even though it renders the property in question of little value.

"How frequently one sees that the Tribunal of Appeal, in allowing the appeal, delivers the appellant as a matter of sheer justice from the clutches of the Council, but it is not generally known that the late Council, as part of its policy of dictation to the ratepayers and public, contemplated the suppression of the Tribunal.

"I suggest to you that it is the duty of every member of the Institute to see that no person holding office under any public body should be a member of the Council of the R.I.B.A., or of any of the Committees, and it is to attain that end that I ask for your support and assistance.

"Mr. Riley is a most zealous officer in the interests of the London County Council, but no man ought to be placed in the position of being judge in his own cause.

"In illustration of this statement, let me refer to a recent occasion when the London County Council promoted an amendment Bill, which I have reason to know was not dealt with in any form by the Practice Committee, by reason of the official influences. It was opposed by the District Surveyors' Association, and this opposition was effected by my brother, who put down an amendment on the second reading in the House of Commons, as well as an instruction to the Committee, and this, though not persevered in, obtained the desired effect.

"That the District Surveyors moved in regard to the Bill in the interests of the public alone shows that they were at some sacrifice prepared to improve the Bill, while the Institute assumed a position of indifference. That this has provoked the indignation of the London County Council is not to be wondered at, but it is our duty to see that the District Surveyors are not penalised because of their attempt to amend the law, and to administer the existing law fairly in the interests of the public.

"I now turn to another matter which I consider needs redress. The Practice Committee is supposed to regulate the professional conduct of all its members, and most of us wish it to be extended to the whole profession. Does it do this efficiently? We hope so, but have no means of knowing, as work of this character is rightly kept secret.

"Some three years ago I was asked, in connection with an action in the King's Bench Division, whether a building had been rightly supervised by an architect, and I found the mortar joints in places ½ inch thick. This mortar was analysed by an eminent analyst, who has many times reported on building materials in the *Builder*, and he stated that no cementing material of the required character existed. Further, we afterwards learned that the contractor had been proceeded against by the local authority for bad materials.

"The case in all its aspects was most flagrant, yet two members of the then Practice Committee entered the witness-box and expressed, in the words of the report, that they found it 'very fairly built indeed.' The jury, after short deliberation (says the report), returned a verdict for the plaintiff—but what can the public think of the value of the professional evidence so disregarded?

"I would mention that the witnesses above referred to are still members of the Practice Committee.

"Some months ago I was surprised to find an advertisement by a London furnishing house for a £200 cottage on the back of a theatrical programme, to which was attached the name of a member of the Practice Committee. . . . .

"At the present time I have a catalogue of furniture with the architect's designs for houses interleaved with house chattels, and a signature and the letters F.R.I.B.A. attached to each plan.

"Is this kind of thing to proceed further? If so, then I am ready to resign my Fellowship, even though I have passed the qualifying examination and been a member for fourteen years.

"What does the Profession say to the nomination of a Fellow who is of an age to qualify, and who still advertises for work in a book issued by the Stores? Is it not surprising that the Practice Committee takes no action, and should any of its members nominate him?

"I ask you to peruse the report of the Practice Com-

mittee for last year and that recently published. Could anything be more colourless and indefinite?

"It is immaterial to me whether you elect me a member of the Practice Committee or not, so long as you make such drastic changes as will ensure a rigid inforcement of professional discipline, and free the Committee from the trammels of officialism.

"I would add that this communication is made in the interests of the Institute, and I particularly desire it shall not be canvassed outside its members."

The result of that document was that the Council, after deliberating on the matter, passed a vote of censure, and the matter was commented upon by the Chairman at the following General Meeting, and his remarks reported in the *Builder* of the 18th May. As the result of that meeting the member censured wrote a letter to the Vice-President who occupied the chair at the meeting in the following terms:—"In the report of the meeting of the Institute, which has appeared in this week's issue of the *Builder*, under the heading 'A Reprehensible Circular,' I find your comments upon the document which I have felt it my duty to issue to members of the Institute. In the course of your observations you are reported to have said that in the document in question there were a 'great many inaccuracies, a great many things which were overstated, and many things which were wrongly stated,' and you go on to say that so far you regard the circular as reprehensible. The question which is now raised between us is a matter of supreme importance to the profession, and I am therefore without doubt entitled to know from you which are the statements contained in my circular which you allege were either (*a*) overstated or (*b*) wrongly stated, or (*c*) what are the many inaccuracies of which you complain? I am entitled to ask you to furnish me with these in order that I may know the grounds upon which you found your criticism, and I trust you will not hesitate to comply with my request. Further on in the report, I observe that you deal with the envelope in which my circular was contained, and which you described as 'a colourable imitation of the envelope issued from the office of the Institute containing the nomination forms,' and you go on to say that the only impression which that could convey—viz., that it emanated from the office—was calculated to have an influence over the members voting, which was an improper influence which could not be condemned too strongly. Let us see that we understand each other in this matter. Do you complain of the style of type used as well as the wording on the envelope? Do you suggest that there was any die, seal, or other device used by the Institute exclusively which had been adopted by me, or in what particular way do you allege an intention to deceive? I must ask you to answer these questions, since the matters between us are such as concern the whole profession, and particularly the future welfare of the Institute. I have yet one more matter which requires to be dealt with. In summing up your criticism you express the hope that in future this kind of misdemeanour would not be repeated. The word 'misdemeanour' has long since lost its ordinary dictionary meaning, and now may be said to indicate a series of statutable offences, many of them involving heavy penal consequences, and to be the complement of felonies which together go to make up the criminal law of this country. I am quite willing to believe, if you so assure me that such was the case, that you did not intend the word you used to bear this, the ordinary accepted meaning, and upon this point I shall be glad to have your assurance. Pending your answer to these matters I reserve my reply to your comments, which I regard as being as unwise as they are unwarrantable." To that letter I got the following reply, dated 26th May:—"In reply to your letter, I may say that the remarks I made respecting your circular expressed the feelings of the entire Council, and were not merely my own views. I do not feel disposed to enter into a discussion on the matter. You may take it that the word 'misdemeanour' was us in the ordinary 'dictionary' sense, and was, I am sure, so understood by every one who heard it." Then a letter was written to the President and Council protesting against the Minute of Censure. Then on the 11th June I received the following from the Secretary:—"DEAR SIR,—Your letter of the 1st June addressed to the President and Council of the Royal Institute of British Architects was considered by the Council at their last meeting. Your correspondence with the Vice-President who presided over the meeting on the 18th May was at the same time laid before the Council. I am desired to inform you that the statement made by Mr. H. T. Hare at the meeting on the 18th May was made by him as representing the Council, and that they endorse the views expressed by him on that occasion. With regard to the grave inaccuracies in matters of fact in your circular, to which Mr. Hare referred, in the fifth paragraph of page 2 of your circular you say that the L.C.C. Bill 'was not dealt with in any form by the Practice Committee by reason of the official influences,' and in the sixth paragraph you say that 'the Institute assumed a position of indifference.' Both these statements are incorrect." Somebody says "Hear, hear" to that. As I was in the Committee Room of the House of Commons and was going to give evidence on that question, but was refused by the Chairman of the Committee because I was not a district surveyor, and the Institute was not represented, I feel confident that the statement in the circular was more correct than that contained in this letter. The Secretary's letter continues: "The Bill was fully considered by the Practice Committee, which reported to the Council, and the report was further discussed by the Council before the attitude of the Royal Institute was decided upon. In the seventh paragraph of page 2 of your circular you say that 'the Practice Committee is supposed to regulate the professional conduct of all its members.' This statement is entirely incorrect. The Practice Committee does not possess the functions you describe. Questions of professional conduct are dealt with by the Professional Questions Committee and by the Council itself. Again, on page 3, you condemn the Practice Committee for taking no action in a specific case of alleged professional advertising. It has no power to take any such action, and its only functions are to consider and make recommendations to the Council. With regard to your expression of opinion in the fifth paragraph of the first page of your circular, the Council, as a result of long experience, are of opinion that the 'official element' which you condemn is really a most valuable one on the Committee." That, Sir, practically deals with this matter I have to lay before you, and having read the circular and the correspondence, I am entitled to consider how the Council was composed who passed the unjust remarks I have just read. Among its members at that time (June 1908) it had five members who had not long been elected to the Fellowship of this Institute, and three of those had only been members of the Institute two years. In the matters I have placed before you I contend most emphatically that I have shown that an outrage has been done an old member by the Council. I may say in conclusion that so convinced am I that there are some here who will see the justice of my remarks to-night, that I have asked no person to second the motion that is before the meeting. I therefore move the motion which stands in my name.

THE CHAIRMAN: The motion before the meeting is: "That in view of the facts before the meeting to-night, arising as they do out of the matters introduced by Mr. Wm. Woodward, this Institute feels that an injustice has been done one of its old members in a Minute of Censure entered at the meeting of the 18th May 1908 for making a statement in a circular (a method since adopted by the Council), and directs that such Minute of Censure shall be expunged." Is there any formal or informal seconder?

Mr. H. Hardwicke Langston said he would second it *pro formâ*.

Mr. Chas. R. Guy Hall [*F.*]: I should like to know on what ground the censure was passed—whether it was from an objection to members of the Institute receiving the circular, or an objection to a circular being issued to members by one private member, or whether it was on the merits of the circular itself?

The Chairman: The only ground is that stated by the Chairman at the meeting of the 18th May 1908.

At the request of the Chairman, the Secretary read the official note relating to the matter in the Minutes of the meeting of the 18th May—viz.: "The Chairman, on behalf of the Council, made a statement characterising as a misdemeanour which should not be repeated the action of a member who had issued, in envelopes colourably imitating the Institute official envelopes, a circular containing inaccurate statements respecting the work of the Practice Standing Committee, such proceeding being calculated to exercise an improper influence over members in recording their votes in the annual election."

The Secretary also read the official report of the Chairman's remarks on which the Minute was based, which reads as follows:—"The Chairman of the General Meeting last Monday, Mr. Henry T. Hare, in opening the proceedings said he regretted to have to call attention, on behalf of the Council, to a circular which had been issued within the last few days by a member of the Institute with reference to the annual elections which were now taking place. There could, he thought, be no objection in a general way to a member circularising his fellow-members on a subject he was interested in, but such member ought to be very certain that the statements he made in his circular were justified by facts. The circular in question referred to the work of the Practice Standing Committee. The members of the Institute Standing Committees devoted an immense amount of time and trouble to the work of those Committees, and he was sure he was not overstating the case when he said that they, as a body, were actuated in a very thorough manner by the interests of the Institute, and that the whole of their labours were devoted to that end. Therefore, when any statements were made with reference to their work, they should be very carefully considered, and nothing inaccurate should be allowed to find its way into such statements. In the circular in question, he was sorry to say, there were a great many inaccuracies, a great many things which were overstated, and a great many things which were wrongly stated. In those respects alone he thought the circular in question reprehensible enough. But there was another point: this circular had been sent out in an envelope which was a colourable imitation of the envelope issued from the office of the Institute containing the nomination forms, an envelope which could not convey any other impression than that it emanated from the Institute, and was therefore calculated to exercise an influence over those members who were voting, which was an improper influence. Such an action as that could not be condemned too strongly. It was not the first time that a thing of this kind had happened. Some years ago the same course was taken by a member of the Institute now deceased, and at that time it was stigmatised in no measured terms. The Council trusted that in the future this kind of misdemeanour might not be repeated. No doubt most of the members who received this circular would discount many of the statements it contained after what he had said. With those few words he thought the subject had better be left."

Mr. Edward Greenop [*A.*]: I rise, Sir, because this matter is very fresh in my memory, as at the time I was Secretary of the Practice Committee, and I may say that the Committee generally felt this matter very deeply. We felt that the Chairman, in his desire to be lenient, had not made the reprimand as severe as the occasion demanded. I am surprised that Mr. Nield should come down here and rake up this matter, standing as he does convicted of having issued, to my mind, a most improper circular. Under cover of that circular he attacked two old and most honoured members of the Practice Committee, one of whom had occupied the chair, I think, for three successive years of the Practice Committee, and than whom nobody stands higher in the profession in the matter of integrity; he is a man who is constantly appealed to in arbitration cases and such matters, because he is known to have the greatest sense of justice and to be most scrupulously exact in his observance of the proper conduct of his profession. The other member, who is now one of the vice-presidents of the Committee, is a man I have known personally, apart from business, for many years, and there is no one who has a higher view of his position as a professional man. I think Mr. Nield would have been well advised to have let the matter rest. A more dignified reprimand and one more deserved I never heard from the chair. I thought Mr. Nield's reading of the matter from the pamphlet with regard to week-end cottages was as unfair as his composition of the circular in the first instance.

Mr. W. Gilmour Wilson [*F.*]: As a member of the Practice Committee, may I say that I think Mr. Nield is very much at sea when he suggests that the official element on the Committee in any way dominates or seeks to dominate the action of that Committee? The Practice Committee is not an administrative body; it is an advisory body, and their assistance is sometimes invaluable. I am very sorry to have listened to an attack upon the Committee, evidently dictated to a large extent by personal animus against individuals. That, to my mind, vitiates the whole document. With regard to the abuse, which we all admit is an abuse, so far at all events as it concerns our profession, of commercial firms seeking to absorb the duties of architect, there seems to be some confusion in Mr. Nield's mind and in the minds of a good many others. There are certain firms which advertise, not only that they build houses, but that they give independent architectural advice, that independent advice being given by one of their clerical staff. That is a very different matter from any firm which has the judgment and the sense to go to a responsible outside member of this profession and ask him openly—not under the rose, but openly—to prepare designs for them and to sign his plans as any other architect would sign his plans. If this sort of charge is to be brought broadcast, what about these catalogues I have got in my office, which contain rain-water heads, mantelpieces and various things stated by certain firms, with the names of the architects on them? What are we to say of a pamphlet, a booklet, I received not very long ago, which gave very detailed particulars of a building, a very fine building, and which states, I think, the name of the architect, a Royal Academician? If the Committee is going to allow this sort of thing, if we are going to allow ourselves to be abused by one of our members, on personal grounds it ought to put its foot down very firmly. There are plenty of abuses for this Institute to deal with, but it is unjustifiable to bring such a charge against a Committee, when the charge is dictated by personal animus.

Mr. Guy Hall: I should like to support Mr. Nield in one of his observations on the circular. The book he referred to is issued by a well known firm. Some time ago, when I was building rather a large bungalow myself, the client brought in this particular book, in which bungalows ranging from £200 to £650, I believe, were set out, and I have once or twice had clients bringing this advertisement of bungalows and stating that it was most absurd to get tenders from builders for an expensive bungalow when they can be built by these firms at a ridiculously low price. As a result of that I wrote to this particular firm and asked them to build one of these bungalows according to the catalogue, and their representative said, first of all, that the estimate was only approximate! Secondly, he said that it did not

include the foundations! And thirdly, he said it did not include any drainage! I will ask you to look up that book and see that in every one of these bungalows the w.c. is an earth closet and, consequently, they do not want any drainage. It costs £30 to build a cesspool sixty feet away from a house with the necessary drainage to comply with the local by-laws, leaving a sum of £170 only to build the cheapest bungalow (£200) advertised by that firm. Clients have said to me, "What on earth is the good of these people issuing these catalogues?" And to finish up this interview that I had with the representative of this firm, he said also that it depended on the distance of the bungalow from the station, and he would be very pleased to give an estimate. That is as far as I could get. Therefore, I think that the criticism made upon these plans is very fair on the part of Mr. Nield.

Mr. GEORGE HUBBARD, F.S.A. [*F.*]: I should like to support what Mr. Wilson has said. Mr. Nield has made a somewhat deliberate attack upon a particular member of this Institute, and in fairness to that member I think that it should be realised that there is a vast difference between the position of that member and an architect retained by the proprietors of a Store. When the proprietors of a Store advertise that they have an architect on their premises who will give professional advice to their clients, then I consider that no member of this Institute can honourably hold such a position. The first duty of an architect when he advises a client is that his advice must be disinterested advice, but when an architect is in the pay of a Store he is no longer in a position to give disinterested advice. He will have to give advice that will suit the proprietors of the Stores who pay him, and that may be very far from professional advice to their clients. Now Mr. White is not in that position. There is a vast difference between his position and that of an architect in the pay of a Store. I do not say that I entirely approve of Mr. White's position; but the difference in their respective positions is not one of degree, but it is a difference of kind.

Mr. LANGSTON: Did we hear read in the Minutes the word "misdemeanour" with respect to this matter?

THE CHAIRMAN: Yes, that word is in the Minutes.

Mr. LANGSTON: Then I should like to propose an amendment. This is a reproach to proper brotherhood. The member who has put his case before us to-night has not committed a misdemeanour; he has committed, perhaps, an indiscretion. He has done unguardedly something that in time to come, if not at present, he may regret having done; but whether that be so or not, we know what the word "misdemeanour" could be stretched to mean, and I say that that word ought to be expunged from our Minutes. I therefore move—and I hope it will be carried without any argument at all—that the word "indiscretion" be substituted.

Mr. H. P. BURKE DOWNING [*F.*]: I cordially second Mr. Langston's amendment, though I think Mr. Nield is extremely ill-advised in the way he has brought this matter before the meeting.

Mr. NIELD: With regard to what has been said about the Practice Committee, may I ask the meeting to believe that my action has not been dictated by any ill-feeling, or from any personal motive at all. It is entirely from indignation that a professional man should be associated with the things I have called attention to. As to Stores giving professional advice, I certainly do not see that Mr. Hubbard has shown any difference between the two cases. I may add that when this circular was issued, some thirty or forty letters came from members of this Institute stating that they had not voted for years because they were so dissatisfied with what was being done by the Committees. As to the statement that I was guilty of intent to mislead with regard to the envelope, I had no knowledge that any special envelope had been used on a previous occasion. Architects have circulars of all descriptions, and I considered that unless something was put upon the envelope, very probably it would find its way into the waste-paper basket without being looked at at all.

THE CHAIRMAN: I am very glad that the expenditure of a portion of the funds of this Institute upon such a vital object as the amendment, and I hope the betterment, of the London Building Act meets with Mr. Nield's approval; and with regard to that matter I might just say that this Institute, neither as individuals nor in its corporate capacity, can prevent any individual member from taking the opposite view. Mr. Woodward has his own views, and is perfectly entitled to his own views, on the London Building Act, and he is quite entitled to go to the House of Commons and give evidence against this Institute if he thinks fit. It is entirely a matter for his own discretion. The Council of the Institute have never at any time wished unduly to trespass upon the individuality or the independence of its members. I may just say in passing that Mr. Woodward is not very well, and we shall not have him here to-night, as we hoped, to enlighten us on the question of dry rot. So I am afraid that matter will have to stand over. I only want to say one word with respect to the vexed question, which I regret has been brought up to-night, of the employment of architects by furnishing firms, Stores, and so on. I must say that whenever cases of this sort have been brought up, the Council of the Institute have acted promptly to put a stop to anything which in their opinion was derogatory to architecture and to the profession; and so much has this been the case that by the new By-laws, now before the Privy Council, powers will be vested in the Institute Council which will enable them to deal very effectually with our own members. I should like to ask Mr. Hare, as he was the Chairman of the meeting at which this particular resolution was passed, to give you in a few words his version of the incident, and then afterwards we will take Mr. Langston's amendment.

Mr. HENRY T. HARE, *Hon. Secretary*: I think it is a little hard on us that Mr. Nield, if he intended to raise this question, should have waited such an unconscionably long time before doing so. Speaking for myself—and no doubt it is the case with other members—I had absolutely forgotten all about it; and it was with some little difficulty that I recalled the exact circumstances as Mr. Nield was speaking. As far as I recollect, the strongest objection that was made by the Council, whose opinions I merely voiced, was that Mr. Nield had sent round this circular in an envelope which, I think I am right in saying, was an exact imitation of the envelope containing the nomination forms for the election of the Council and Committees; and being sent round in that form it certainly conveyed the impression that it emanated from the office of the Institute; so much so that several people called here and asked the Secretary what was the meaning of his sending such a document from the Institute. There cannot be any question, when that happened, that it did convey that impression; and if a number of people could call and ask the question no doubt there were a much larger number of people who had the same impression and did not inquire about it. That was the main reason of the objection and of the censure. But there were other things alluded to as being inaccuracies in the circular, and which were explained in the letter afterward sent to Mr. Nield from the office of the Institute. These inaccuracies were not particularly objectionable, and were doubtless simply due to want of knowledge as to the functions of the Practice Committee; but there was one allegation that caused a great deal of dissatisfaction, and worse than dissatisfaction, in the minds of the Council and of members of the Practice Committee. That was the accusation or the insinuation that the Institute had withheld its hand from taking any action with regard to the County Council because it was influenced by officials of the County Council who were

members of the Practice Committee. That was a very improper thing to insinuate, and I think everyone felt it was most reprehensible. As to the word "misdemeanour," I am afraid I do not quite know what is the exact dictionary meaning, but I do not think there is any particularly objectionable meaning to that word except that it is a legal word.

Mr. LANGSTON: It is a word used in the Criminal Courts.

Mr. HARE: Yes, but that is not the ordinary dictionary meaning of the word, and in the letters I wrote to Mr. Nield I particularly said that I did not mean it in any other sense than the ordinary dictionary meaning; and if it is any consolation to Mr. Nield to have the word altered to "impropriety" or a word of that kind, I do not suppose anyone will object to that.

Mr. FLOCKHART: Can the envelope be produced?

THE HON. SECRETARY: We have not got it, I am afraid, but there is no question about it.

THE CHAIRMAN: I will put the amendment first: that the word "misdemeanour" be omitted from the minutes of the meeting of the 18th May 1908.

Mr. LANGSTON: And the strongest word that might be put instead would be "indiscretion."

THE CHAIRMAN: And that the word "indiscretion" be substituted.

Mr. HARE: I would suggest "impropriety."

Mr. DOWNING: I suggest "grave indiscretion."

Mr. SAXON SNELL: It is more than indiscretion. I support "impropriety."

Mr. HUBBARD: The chief objection was the appointment of this particular kind of architect. Surely the word "indiscretion" is quite strong enough.

Mr. BAXTER GREIG [*A.*], rising to a point of order: As reported in the Minutes this is not a resolution of the Institute. It was not a motion of the meeting. It came as a statement from the Council; the Institute as a body had no opportunity of discussing it; it was simply voiced by the Chairman, and no comments were made upon it. I therefore suggest that it is not competent to this meeting to make any alteration, but the most that can be done is to refer the matter back with any suggestion.

Mr. LANGSTON: I submit that this meeting as an act of grace can do what I ask them to do, and not keep such an offensive word on our Minutes.

Mr. HEATHCOTE STATHAM: But the statement in the Minutes is a record of what was said.

Mr. G. A. LANSDOWN [*F.*], rising to a point of order: Inasmuch as the Minutes were brought forward at the next meeting after that of the 18th May, and signed by the Chairman as correct, surely it is within our power now to alter any word in that Minute after notice of motion.

Mr. W. HENRY WHITE [*F.*]: Every member of this meeting has a right, no doubt, to voice his own feelings in his own manner, and it is for the members to say whether or not they agree with him; but in reference to the matter in which my name has been used, I merely wish to point out that the whole subject is under the consideration of the Council, who have the fullest information upon it, and it rests with them to deal with.

The amendment being put to the vote—viz., that the word "indiscretion" be substituted for "misdemeanour" in the Minute in question—was carried unanimously.

Mr. J. NIXON HOLSFIELD [*A.*]: Before the motion is put may I say that it does not seem that much harm would be done were the whole thing wiped off the slate? I do not know what the row is about, but we have now come to the conclusion that the action of Mr. Nield, whatever it may have been, was not a misdemeanour, but was only an indiscretion. Then why should we have a record of an indiscretion on our Minutes?

No further observations being offered, the amendment was put as the substantive motion, and carried without dissent.

Revised Regulations for Architectural Competitions.

THE CHAIRMAN: The next business before the Meeting is to consider the Revised Regulations for Architectural Competitions. You will all have received the revised draft which has been approved by the Council. You will notice that it has been printed in various kinds of type, and I think it would facilitate the progress of the business if we take the matter paragraph by paragraph, and devote our attention principally to the matter printed in black type, as this represents the new proposals.

Mr. SAXON SNELL [*F.*] said he had an amendment to propose to every clause in the paper, and as it was already very late it would be quite impossible to get through the clauses even if they sat till midnight. He would therefore move the adjournment of the Meeting.

Mr. LANGSTON seconded.

Mr. T. E. ECCLES [*F.*] (Liverpool): As the representative of one of the Allied Societies, I move that the Regulations be referred back. We have only had this document a few days, and, it being holiday time, we could not get our Council together properly to consider this document, which is of vital importance to the Allied Societies.

Mr. W. G. WILSON: The matter ought certainly to be placed before the Allied Societies.

Mr. LANCHESTER: I should like to give my reasons for supporting Mr. Eccles. There is evidently a large number of members who have suggestions to offer, and I do not believe a document of this character can be discussed with any profit in such a Meeting as the present. We should do much better to have members' views placed in shape carefully in Committee, so that everyone who has expressed an opinion should have it carefully considered. The Committee will be able to bring forward all these suggestions, and their reasons for adopting or rejecting them, at a future time. Time would be saved all round by referring the matter back.

THE CHAIRMAN: Mr. Snell's motion is that the Meeting adjourn, and in the natural order of things this document would come up for consideration at the next Business Meeting.

Mr. SAXON SNELL: I should only move that because of your proposal to discuss it clause by clause. I have another amendment I would very much rather move, viz. that it be referred back. If I have the permission of the Meeting, I would like to say a word upon that. I feel this very strongly. I do not quite know where this document came from, who compiled it. I know that when some months ago only one alteration was suggested in the Competitions Regulations, it was thought important enough to refer it to a Special Committee, a Committee composed of the Competitions Committee and four co-opted members. Now here we have a number of most important alterations passed by what Committee we do not know. If, Sir, you had not started in that way I was going to move that it be referred back to a Special Committee, to be composed, as before, of the Competitions Committee and at least four co-opted members; and now a new point has been raised by Mr. Eccles, who suggested that the Allied Societies should have something to say to it. With that I quite agree; we could refer it back to the Committee, with power to consult the Allied Societies—that would be better still. I feel it is most important that it should be referred back to a Special Committee.

Mr. LANCHESTER: If you suggest that the Allied Societies should be on as co-opted members I should be with you.

Mr. SAXON SNELL: I should say the Presidents of the Allied Societies.

THE CHAIRMAN: Do you mean all the Presidents?

Mr. SAXON SNELL: They might be invited to send their views to the Committee.

THE CHAIRMAN: I am perfectly ready to take your instructions on this matter, but I should like to point out to

the Meeting that the one particular point that Mr. Snell referred to consisted in the desirability or undesirability of adopting the jury system in large and important competitions, and for that special purpose several other metropolitan architects were co-opted on to this Committee. They did their work and reported to the Council, and the whole question of the Regulations was then referred back to the Competitions Committee. The first thing the Competitions Committee did was to send out a circular to the whole of the Allied Societies drawing attention to the fact that the whole of these Regulations were under review and inviting suggestions from them. All these suggestions were received, sifted, and considered, and the whole of the suggestions, so far as in the opinion of the Competitions Committee they were workable or desirable, were incorporated in this document as you see it. This document was then placed before the Council of the Institute, who have now brought it before the general body of members. If you refer the document back with some such instruction that the whole of the Presidents of the Allied Societies, or any number you specify, shall be co-opted on to this Competitions Committee, and again consider the matter and report, the Competitions Committee will, I am sure, be willing to meet those gentlemen and consider their views as expressed by themselves instead of by letters. But there are other members who have come prepared, I daresay, to make amendments and suggestions for the betterment of these Regulations; and there must be a number of architects in London who can only lay their views before their fellow-members at such a Meeting as we have to-night. We have tried hard to get information, but the channel by which we should get it is on such an occasion as the present; and, if we had discussed it clause by clause, at the end we should have had to remodel the document upon the lines we had arrived at. If, as an initial step, you desire now that the Presidents of Allied Societies should be co-opted on to this Committee, it is open to you to pass a resolution to that effect, and I have no doubt the Competitions Committee will heartily agree with it.

Mr. Burke Downing: I support the motion that we should go on, for this reason: We should, I suppose, only go on with Clause 1, but anyhow we shall have made a beginning, and so long as we do not pass Clause 1, but leave the passing of clauses until the end, that will enable us between this and the next Meeting to consider the suggestions we have to make, and we can discuss the matter when we have had the paper in our hands somewhat longer. The idea of referring back seems to suggest that we should communicate our individual suggestions in writing, for the Committee to consider, and we shall not have the advantage of hearing what other members have to say.

Mr. Baxter Greig: It would be futile to proceed; suggestions may be forthcoming from the Allied Societies which would tend to modify our opinions.

Mr. P. S. Worthington [*F.*] (Manchester): I think that the motion to adjourn consideration of this question would meet the views of the Allied Societies, because it would give them time to discuss the question, and then the whole thing would be discussed together. I think Mr. Eccles would be quite willing to agree to that. So far as my own Society is concerned, we have discussed the question as far as the limited time allowed: we had this document put before us on Thursday, and we called a Meeting on Friday, but it has been impossible in the time to consider the question before coming to the Meeting to-night; and it seems to me that the adjournment is the right course to pursue, because the Allied Societies are very largely interested in this matter, and are affected in a more peculiar way than the metropolitan members.

Mr. Matt. Garbutt: As I understand, the views of the Allied Societies have been already taken on this, and I do not see what gain there will be by referring it back. If we simply refer it to the next Business Meeting, that wil give a month, during which the Allied Societies may discuss the matter and instruct their representatives to bring their views before that Meeting. Nothing would be gained by referring it back in form, and I support the simple proposal to adjourn the Meeting.

The proposal for adjournment was then put from the Chair and carried unanimously.

St. Paul's Bridge.

The Times of the 6th inst. published the following letter addressed to its Editor:—

5th January 1910.

Sir,—To those whose pride is in their city the scheme now before the Corporation is of the keenest interest; a new bridge and a new approach, opening up St. Paul's, provide the opportunity for beautifying a quarter of the town. Approached from the west the Metropolitan Cathedral forms an impressive picture, notwithstanding the iron railway bridge in the foreground. On other sides the great church is crowded upon by tall houses. There is now the chance of a south view by the proposed new street, which should have the dome in its vista.

It is the earnest hope, not only of architects and of other artists, but of all who desire beauty in our town life, that this great change shall be made, not only with a view to traffic, but at the same time with the wider consideration for all else that may be gained thereby. The new bridge should be a feature with architectural character, and should not be a clever arrangement of iron girders.

I trust that those in authority will admit, in consultation with them at the initiation of the scheme, the best talent to be obtained on its architectural or æsthetic bearing. The Bridge House Estates Committee graciously received a deputation of our Royal Institute, which included Sir Lawrence Alma-Tadema and Sir George Frampton; the painters and sculptors also feeling that a great opportunity is with us.

If, through your influence, a wide public interest is taken in this matter the hands of the committee will be strengthened, and they will realise what a really noble scheme is expected of them. London has an unfortunate record of lost opportunities.

I am, Sir, yours obediently,

Ernest George, *President R.I.B.A.*

Architectural Copyright.

In the Journal of the 12th June last appeared an article on the question of "Artistic Copyright as affecting Architects," embodying statements prepared on behalf of the Royal Institute by Messrs. John W. Simpson [*F.*] and John Belcher [*F.*], R.A., and presented to the Law of Copyright Committee. This Committee included representatives of literature, painting, the dramatic and publishing worlds, and law, and its Report has just been published [Cd. 4976]. Among the signatories are

Lord Gorell (the Chairman), Sir L. Alma-Tadema, Mr. Anthony Hope, Professor Raleigh, Sir Frederick Macmillan, and Mr. Askwith, K.C. Mr. Henry Clayton, Mr. Joynson-Hicks, M.P., Mr. Scrutton, K.C., and Mr. Trevor Williams append notes qualifying their acceptance of the Report. The Committee held sixteen sittings and examined forty-five witnesses, among whom were representatives of authors, architects, photographers, designers, music publishers, composers, &c.

The terms of the reference to the Committee were "To examine the various points in which the Revised International Copyright Convention signed at Berlin on 13th November 1908 is not in accordance with the law of the United Kingdom, including those points which are expressly left to the internal legislation of each country, and to consider in each case whether that law should be altered so as to enable his Majesty's Government to give effect to the Revised Convention."

The following extracts from the Report contain some of the chief recommendations of the Committee so far as they affect architecture. It will be seen that a step of the highest importance has been taken towards the safeguarding of an architect's copyright in his buildings, plans, and drawings.

With regard to architecture it is to be observed that in giving protection to actual works of architecture as opposed to plans made to guide the architect in his work, the Revised Convention goes beyond British law, which forbids copying plans of a building, but not copying the building itself.

Plans and models appear to come under the head of "literary and artistic works," and as to them there has been no dissentient evidence given, nor any difference of opinion in the Committee.

The evidence as to buildings themselves has been somewhat conflicting, but the Committee were much impressed by that of M. Maillard.

It is clear that if the Revised Convention is to be followed with regard to works of architecture, the scope of British law must be enlarged.

The Committee, by a large majority, have come to the conclusion, after due consideration of the evidence, that it is desirable to recommend that architecture be accepted as matter to be protected, both for the sake of uniformity and because it deserves to be protected and presents no difference in principle from that applicable to the sister arts.

They further consider that protection should be given against copying buildings whether by use of plans or otherwise, and against use of drawings or models for other purposes than those authorised, and by other persons than those supplied therewith.

With regard to the term "architecture," the Committee gather that the object of the article is to protect works of original and artistic character, and not works of common type which have been frequently produced on previous occasions. There may possibly be difficulties of proof of infringement, but this does not affect the principle.

There may be difficulties as to remedies. Damages might not be technically provable, and destruction not permissible, as buildings are usually not the property of the infringer; but penalties might be awarded against anyone who copies or is a party to copying.

It may be pointed out that the Royal Commissioners of 1878 did not consider that it would be practicable to give this protection, which is now suggested, to architects; but after hearing the evidence and understanding that no difficulty in affording this protection has been found in other countries, the Committee have formed a different opinion, and their conclusion is in favour of the adoption of Article 2 in this respect.

The Committee recommend the adoption of Article 7, which provides for the term of protection to include the life of the author and fifty years after his death, and the necessary amendments of the British law to give effect to it.

Three of the signatories, Mr. Joynson-Hicks, Mr. Scrutton, and Mr. Trevor Williams, are opposed to the extension of copyright to architecture, the former considering it an innovation exceedingly difficult to carry out in practice, and likely to be very detrimental to the progress of building construction.

"The Builder" Competition.

The designs submitted in *The Builder* competition for a suggested new front to the premises of the Institute, No. 9 Conduit Street [JOURNAL, 16 Oct., p. 771], were on view for some days up to the 1st January at the Architectural Association Gallery, Tufton Street. The competition, it is understood, attracted 160 competitors, and the average merit of the designs, mostly doubtless from young men, was very good. A criticism of the drawings was given in *The Builder* for the 25th December. The award was made by the Editor in conjunction with Mr. Halsey Ricardo and Mr. Curtis Green, and the first prize has gone to an Associate of the Institute, Mr. Stanley J. Wearing, of Leicester. Of the winning design *The Builder* critic says: "It is a good example of traditional Classic treatment, with two fluted pilasters with capitals in the centre, flanked by plain pilasters at the sides; the design is simple and dignified, and the whole of the details are worked out with knowledge and refinement. Few, if any, of the competitors exhibit such scholarly restraint as the author of this design." The second prize is awarded to Mr. Arthur Welford for "a design of very high quality," "a most original bit of architecture, highly creditable to its author." The two premiated designs are published in the current number of *The Builder*.

The British School at Rome.

The recently issued annual report of the managing Committee of the British School at Rome states that during the past year some twenty-five students and Associates have profited by the facilities which the School, its staff and Library, offer for the prosecution of the many branches of study which Rome and Italy afford. The Committee express gratification at the proposal put forward by the Society for the Promotion of Hellenic Studies, advocating the formation of a sister Society for the Promotion of Roman Studies. The staff in Rome have long felt the want of some corporate body of this kind in England. A special feature of the new organisation would be the publication of a Journal devoted

to Roman Studies. All friends of the School are asked to help in the creation of the proposed Society. The Report has the following references to members of the R.I.B.A.:—

"The Committee have recently welcomed as a member of their body Mr. John W. Simpson, a Fellow of the Royal Institute of British Architects and former Vice-President of that body, whose presence greatly facilitates discussion on matters of common interest to the School and the Institute. They learn that the latter body contemplates the foundation of an architectural institution in Rome, and hopes have long been entertained of the possibility of co-ordinating and combining the various British artistic and learned organisations in Rome, whether existing or to be founded. Such a plan, while securing to each its just autonomy, would give to all what has long been needed, a worthy and dignified home. It is obvious that a scheme on these lines would take care and time to mature, but its object is one on which thought and labour will be most well expended. The Committee hope to be able to announce in their next report the substantial progress of this scheme."

"Mr. A. E. Beswick, A.R.I.B.A., devoted about two months to the study of Renaissance architecture in Italy, visiting most of the principal cities."

"Mr. A. Stratton, A.R.I.B.A., and lecturer at King's College, visited Italy during the winter in order to prepare a fourth edition of the well-known and important work on the Architecture of the Renaissance in Italy by the late Mr. W. J. Anderson, which has just made its appearance."

"Mr. Leslie Wilkinson, A.R.I.B.A. (Student 1906), has contributed several drawings to the new edition of Mr. Anderson's work, already mentioned as having been re-edited by Mr. Stratton."

A satisfactory feature of the financial statement is the growth of the list of annual subscribers. The Committee, however, ask for better support of the special ventures of the School which make up no small share of its activities.

Continental Town Planning.

The National Housing and Town Planning Council are arranging a tour at the end of May in connection with the International Housing Congress to be held at Vienna. The party will probably leave London on 23rd May, travelling *vid* Brussels to Berlin, where a visit will be paid to the Town Planning Exhibition, which will be open in the Prussian capital. Dresden will be visited, and Vienna reached on 30th May, and after attending the Congress and studying the lay-out of this delightful city the return journey will be made on 6th June.

The General Meeting of the 23rd May, hitherto blank on the Sessional Programme, will be devoted to a Paper by Mr. E. A. Rickards [*F.*] on "The Art of the Monument."

CORRESPONDENCE.

The Church Organ.

To the Editor JOURNAL R.I.B.A.,—

SIR,—I do not know what Mr. Shearman means by the sentence in the first paragraph of his letter —"Mr. Cliffe . . . favours another contention by Mr. Statham—a central position for the organ on a screen: in place of the Rood, apparently!"

Mr. Shearman has either confused two different people or two different proposals. I never for a moment suggested the erection of the organ on the chancel screen of a parish church. I suggested a return to the old position *in cathedrals*, on the screen between nave and choir, and a new method of arranging it. H. H. STATHAM [*F.*].

The Impending Parliamentary Election and the Law of Architectural Copyright.

120*a Kensington Park Road, W.*, 3 *Jan.* 1910.

To the Editor JOURNAL R.I.B.A.,—

DEAR SIR,—I enclose herewith an abstract of the recommendations of the Committee (Lord Gorell presiding) appointed in March last by the President of the Board of Trade to report to the Government as to the legislation necessary to give effect to the revised International Copyright Convention signed at Berlin in November 1908. The extracts are as follows:—

As to architecture, the Convention goes beyond British law, which forbids copying plans of a building, but not copying the building itself.

After due consideration the Committee, by a large majority, have come to the conclusion that it is desirable to accept architecture as matter to be protected, both for the sake of uniformity and because it deserves to be protected and presents no difference in principle from that applicable to the sister arts.

They further consider that protection should be given against copying buildings, whether by use of plans or otherwise, and against use of drawings or models for other purposes than those authorised, and by persons other than those supplied therewith.

With these exceptions most of the subject-matters enumerated in the article are already protected in this country, and the Committee recommend its adoption.

As to the position of copyright in the overseas Dominions, the Committee understand that it is proposed to call a conference of Colonial representatives, and it seems to them of the utmost importance that the Colonies should come into line with Great Britain, and that, so far as possible, there should be one law throughout the Empire.

It may be that some members are not aware of the result of the deliberations of the Committee, but as will be seen they, by a large majority, consider it desirable that architecture should be "protected" not only in the British Isles but also in our overseas Dominions.

As a matter of practical politics affecting the profession at large, now is the time to obtain the necessary "pledges" in support of architectural copyright, and I venture to make a suggestion and recommendation that individual members of the profession should send a written request to *all the Parliamentary candidates* in their constituency, asking whether, in the event of their being returned to Parliament, they would support a Bill to give effect to the recommendation of the Law of Copyright Committee 1909 as applied to architecture in particular.

All the answers should be kept until the result of the election is known, and later the replies of the Members of Parliament forwarded to a representative committee of the profession, which could be appointed to deal with the matter.

In the event of legislation affecting the law of architectural copyright being submitted to Parliament, the members supporting the Bill could, if necessary, be very properly reminded of their promises.

I append herewith a copy of a letter which I have addressed to all the Parliamentary candidates for Kensington N. and Paddington S.

Yours faithfully,

HERBERT SHEPHERD [*A.*].

To . . .

DEAR SIR,—I should be glad if you will kindly inform me, in the event of your being elected to represent the constituency in Parliament, if you would be prepared to favourably consider and support a Bill to give effect to the recommendations of the Law of Copyright Committee 1909, more particularly as applied to architecture.

Your reply would oblige.—Yours faithfully, H. S.
(Stamped and addressed envelope
for reply enclosed.)

MINUTES. V.

At the Fifth General Meeting (Business) of the Session 1909-10, held Monday, 3rd January 1910, at 8 P.M.—Present, Mr. James S. Gibson, *Vice-President*, in the Chair; 31 Fellows (including 8 members of the Council) and 42 Associates (including 1 member of the Council), the Minutes of the Meeting held 13th December 1909 having been published in the JOURNAL were taken as read and signed as correct.

The Hon. Secretary having announced the decease of Baron Henry von Geymüller, of Baden Baden, *Hon. Corresponding Member*, the regrets of the Institute were ordered to be entered on the Minutes, and a message of sympathy and condolence to be conveyed to the relatives of the late member.

The Hon. Secretary formally acknowledged the receipt of works recently presented to the Library, and a vote of thanks was passed to the donors.

The following members attending for the first time since their election were formally admitted by the Chairman:—viz. William Charles Antcliffe, John Weston Jarvis, Robert Pierce, Hugh Alexander Ross, George Vey, jun., *Associates*; John Stanley Heath, *Fellow*.

The following candidates were elected by show of hands under By-law 9:—

AS ASSOCIATE.

HENDERSON: ANDREW GRAHAM [*F.* 1903, *S.* 1905, *Qual.* July 1909].

AS HON. ASSOCIATES.

COPE: ARTHUR STOCKDALE, A.R.A.

EVANS: ARTHUR JOHN, D.Litt. Oxon., Hon. LL.D. Edin., Hon. D.Litt. Dublin, M.A., F.R.S., F.S.A.

Mr. G. Ernest Nield [*F.*] having, in accordance with notice, discussed matters referred to in items Nos. 1, 2, 3, and 4 standing in Mr. Woodward's name on the notice paper for the meeting of 29th November last, and having read a circular letter he had issued to members of the Institute in May 1908 and correspondence arising thereon, and having, further, contended that nothing in his conduct justified the censure passed upon him at the meeting of the 18th May 1908, moved finally that "in view of the facts before the meeting to-night, arising as they do out of the matters introduced by Mr. Wm. Woodward, this Institute feels that an injustice has been done one of its old members in a Minute of Censure entered at the meeting of the 18th May 1908 for making a statement in a circular [a method since adopted by the Council], and directs that such Minute of Censure shall be expunged."

The motion having been formally seconded by Mr. H. Hardwicke Langston [*A.*], a discussion ensued, and it having been objected that the circumstances did not warrant the use of the term "misdemeanour" in the Minute of Censure, an amendment was eventually agreed to, and carried unanimously as the substantive motion, that the word "indiscretion" be substituted for "misdemeanour" in the Minute in question.

The Chairman formally presented and invited discussion on the Revised Regulations for Architectural Competitions, copies of which had been previously issued to members.

Mr. A. Saxon Snell [*F.*], calling attention to the lateness of the hour, and stating that he had amendments to propose to every clause in the Paper, moved the adjournment of the meeting.

The proposal having been seconded by Mr. H. Hardwicke Langston [*A.*], was put from the Chair and agreed to.

The proceedings then closed, and the meeting separated at 10 P.M.

ALLIED SOCIETIES.

The Royal Institute of the Architects of Ireland.

The Annual General Meeting of this Institute was held on the 16th December, Mr. Fredk. Batchelor, *President*, in the Chair, when the Council's Annual Report was presented and adopted, and the officers and Council for the ensuing session elected. Most of the matters dealt with in the Report were touched upon in an Address subsequently delivered by Mr. Batchelor, and from which the following extracts are taken:—

Attention has been drawn in the Report to the potential advantages to the architectural profession in Ireland which lie in the projected School of Architecture in the new National University. It would be difficult to overestimate the future results of a well-equipped and properly organised Architectural School in the University, not alone on Irish architects, but on the Irish public as well, provided that the curriculum be arranged to embrace both academic and practical training. The existence of such a University School will bring architecture more prominently before the public; it will undoubtedly attract many students of higher social standing to the architectural profession, and the effect of the superior training they would presumably receive would soon be seen in the improvement in public and domestic architecture throughout the country. Thus we hope the stigma which unfortunately attaches to Irish architects would eventually be removed, and it would no longer be the custom for Irishmen to seek in England and Scotland for architects to design buildings of importance in Ireland on the plea that no Irish architects were capable of doing the work. In view, then, of the vital importance of starting the School on the best possible lines, we await with much anxiety the selection by the Commission of a gentleman to fill the Chair of Architecture. Upon that appointment hangs the future success or failure of the School. . . . . There is a further reason for our anxiety in regard

to the establishment of this School which I ought to mention, and it is in connection with the qualifying examination for admission to the Class of Students in our Institute. We have delayed the preparation of the syllabus for this examination until the curriculum of the University School would be settled, as it would obviously be to everyone's advantage that the examination should, as far as possible, be framed on the lines of that curriculum. We are, however, face to face with the difficulty that, during the interval between the passing of the new by-laws and the institution of this qualifying examination, we could have no power under those by-laws to admit into the Institute, either as students or members, any persons who have not been in practice as principals for seven successive years. One of the first duties of the new Council who have been elected to-day will, therefore, be to draw up the syllabus of an examination which, while testing sufficiently the qualifications of the candidate, will not commit the Institute to any fixed standard until the School of Architecture has had time to develop.

Before I leave this subject, perhaps I may be allowed to refer to the proposal I submitted to you in my Address last year for the amalgamation of the Architectural Association with this Institute. The scheme was very thoroughly discussed at two General Meetings of the Association eight or nine months ago, and, so far as one could form an opinion, was very favourably received by the members, but no formal vote was taken upon it, as it was felt that no decision upon such an important matter could be arrived at until the result of the application to the University Commission to establish the Chair of Architecture would be known. You may remember that the scheme provided, amongst other things, for the taking over by the Institute of the educational functions of the Association; but it was then recognised that, if the University School should prove a success, it would be both unnecessary and undesirable to maintain a similar school in connection with either the Institute or the Association. One cannot, of course, say at this moment how this University scheme may succeed, we must closely watch the march of events; but I feel that, as this Institute is responsible for its inception, it is now our duty to do all that lies in our power to support it and make it a great educational centre for the training of Irish architects. If, then, the main purpose for which the Architectural Association was resuscitated be achieved by other means, what good can result from the continued existence of this second architectural body in a comparatively small centre like Dublin? I am more than ever convinced that it would be of great benefit to our profession in Ireland if the two bodies were to agree to unite and work together for their mutual advantage. The increase in membership alone would undoubtedly strengthen the position and prestige of the representative Institute, and the regular meetings for the reading of papers and discussion, which have always been such an admirable feature in the work of the Association, would become of increased value by the presence and co-operation of the senior members of the profession. I ask, then, brethren, that this subject may be given the consideration that its importance demands. A very large number of our members are also members of the junior Association, and they are so simply because they have felt it their duty to support the efforts of the Association in the education of the architectural student. But if circumstances should change during the next few months, and the educational work of the Association should be no longer necessary, it will become a serious question as to whether it would not be the duty of the members of this Institute to use their influence to bring about the amalgamation. . . .

Passing from this subject I want to say one word on the Incorporation of the Institute. It is a matter, I think, for much congratulation that after seventy years of existence we are at last a corporate body, with a legal status and power to hold property and manage our finances without the assistance of trustees. . . .

The new Seal of the Institute, designed by our friend Richard Orpen, has been beautifully modelled by Miss Elvery and is now being engraved; it will, I trust, appear on the first certificates of membership to be issued subsequent to our Incorporation.

Another matter for congratulation is the success which has attended the Institute Journal in its new garb. It has been so well managed by Mr. Allberry, our most indefatigable Secretary of the Publication Committee, that not only has it paid its way, but has contributed a not inconsiderable balance to the general funds of the Institute. This Journal should become a valuable means of keeping in touch with our provincial members, who should be invited to contribute matters of general or technical interest. Buildings of importance designed during the year by our members might also be illustrated. . . .

Speaking of other Architectural Societies brings me to the last subject I have to touch upon, and that is, the proposed re-alliance of the Ulster Society with this Institute. You are aware that the Ulster Society, soon after it seceded from its alliance with this Institute, applied to the British Institute for direct affiliation, but in consequence of the representations of your Council the R.I.B.A. refused to grant the alliance until an amicable settlement of our differences had been arrived at between the Ulster Society and ourselves. I need not bring you through all the protracted negotiations which then ensued, but they resulted in a scheme submitted by the R.I.B.A. which made the re-alliance of the Ulster Society with this Institute a condition precedent to the granting of the Ulster Society's application. The terms of the re-alliance were to be settled at a conference between the two bodies, and any matters in dispute at the close of the conference were to be submitted to the arbitration of the R.I.B.A. Council. As you have already learned from the Council's Report the conference has taken place, the terms of the re-alliance have been settled, and the only point still remaining in dispute is that very serious question of the Schedule of Fees, and this will be dealt with by the R.I.B.A. Council. I sincerely trust that we shall shortly be in a position to submit to you certain revisions in the new by-laws which will become necessary owing to the re-alliance of the Ulster Society with this Institute. I am convinced that friendly communication and co-operation between the two representative bodies of the architectural profession in Ireland would eventually result in uniformity of practice, which would be a source of strength to the individual practitioner, and at the same time the Societies would be in a position to make their influence felt by the building public, so that it would be able to discriminate between the properly qualified architect and the unqualified quack.



Denton Park : South Elevation.

CARR OF YORK.

By Sydney D. Kitson, M.A.Cantab. [*F.*]

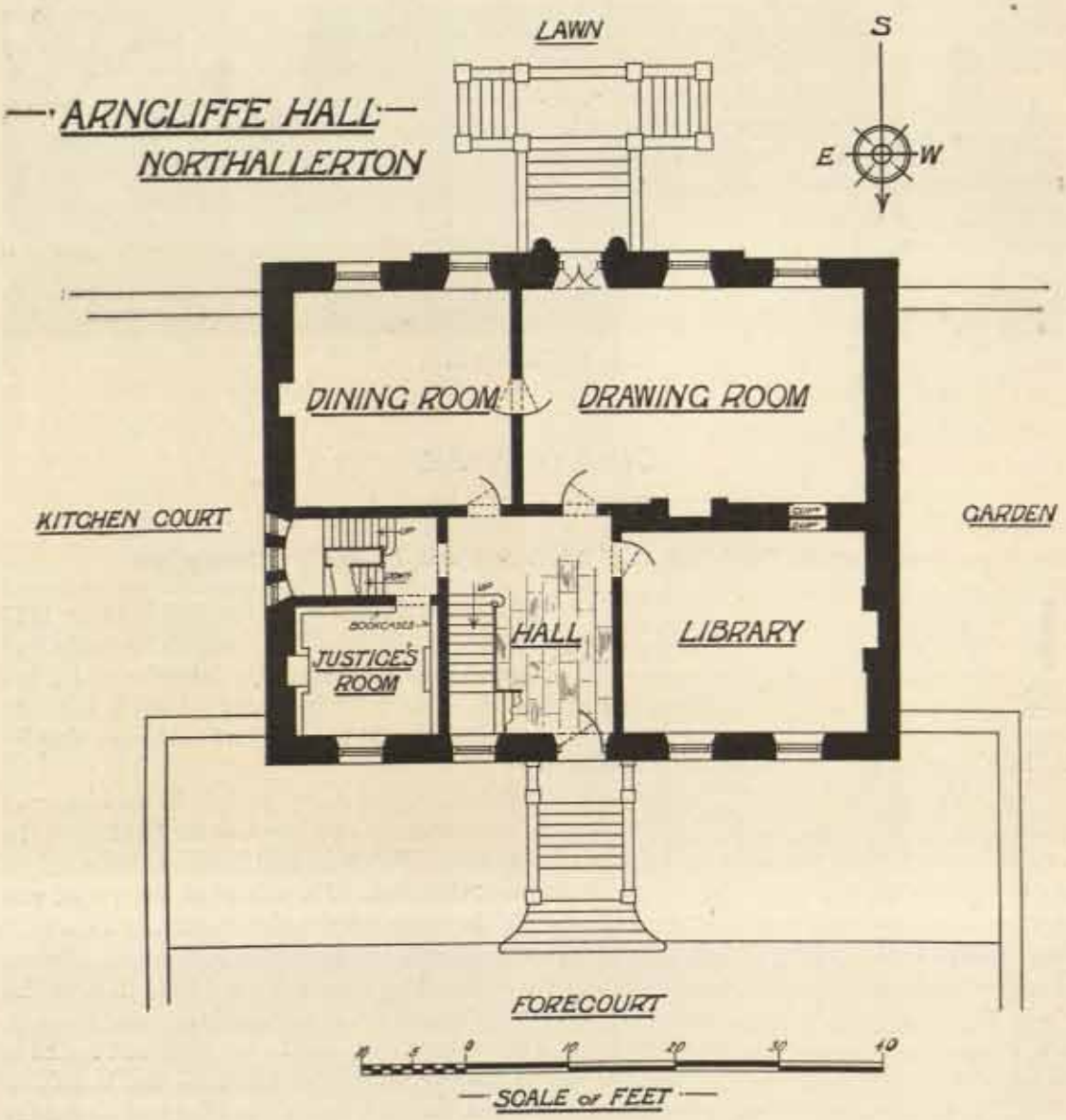
Read before the Royal Institute of British Architects, Monday, 17th January 1910.

I PROPOSE to speak about the work of a provincial architect who flourished between 1750 and 1800. The only claim that I can make upon your interest in my subject lies in the fact that the work of Carr of York is not well known and has escaped the attention which has lately been given to the architecture of the eighteenth century. The reason for this is not very far to seek : for Carr's work is, frankly, dull and uninspired. It forms a part of the last chapter in the history of the English building tradition.

Carr was a busy and highly successful man—indeed, there are two periods in the history of building in Yorkshire which stand out as times of great activity : the one was the last half of the twelfth century, when the Abbeys of Kirkstall, Fountains, Rievaulx, and Selby, to name only a few of the greater buildings of the county, were being executed. The other building period was separated from the first by six centuries of time. In the last half of the eighteenth century, a very large number of the country houses in Yorkshire were rebuilt, and many new ones arose. Almost the whole of the building of this latter period was designed by Carr of York. In both cases the works were carried out to the order of the great landowners of the county, and they were severely simple in style. There the similarity ceases. The contrast between the purposes and methods of the two periods is enormous. The last half of the twelfth century witnessed the transition from Romanesque to the fully developed Gothic, and the problems of vaulting and abutment were nowhere more eagerly worked out than in the Abbey Churches of Yorkshire. The very restrictions of the Cistercian Rule concentrated the minds of the builders upon advance in constructional methods. The result was a rapid and orderly progress in the art of building : a progress so rapid that its stages may be traced in the details of churches that grew in one continuous "build." Carr, who was the supreme director of the building activity in Yorkshire in the last half of the eighteenth century, had a similar origin to that of the master-masons of six hundred

years before. He was the son, the grandson, and the great-grandson of masons, and he had all the practical knowledge and the hereditary tradition which made for progress in the old days. But Carr tried no experiments, he made no advance, and the old building tradition after his fifty years of abundant employment had almost disappeared.

The village of Horbury, near Wakefield, where John Carr was born in 1723, appears to have



been always of some considerable size and to have supplied its own wants; for the parish registers, which have been printed, record the names of workmen in many trades, weaving and building being the most numerous. The Carrs seem to have been masons as a matter of course for at least five generations; and John Carr was the son of Robert Carr, mason, who again was the son of John Carr, mason, and so on. Michelangelo used to attribute his aptitude for sculp-

ture to the fact that his foster-mother was the wife of a stone-cutter at Settignano : with far greater force could young Carr claim that his career was settled for him by hereditary circumstances.

After passing through the village school, young Carr was early set to work either in the quarry at Horbury which his father owned, or upon buildings, such as Chevet Park and Bretton Hall in the neighbourhood, on which his father was engaged as master-mason. Stories have been preserved which illustrate his youthful ability and accuracy. For instance, when the other masons engaged on a piece of work had all failed in setting it out correctly, Carr's father said "Let the lad have a try," and young Carr successfully solved the problem. Again, before starting from home on a Monday morning for his week's work his mother would provide him with a large circular meat pie ; Carr would divide this with his mason's compasses into six exactly equal parts. My excuse for repeating such stories must be that they seem to form an index to the homely character of the man : a character which he preserved throughout life, although his dividers were afterwards used in planning some of the largest buildings of his time.



MR. HAWSON'S HOUSE, HALIFAX : FIREPLACE IN PARLOUR.

When quite a young man, and some time before the year 1750, Carr, conscious of his ability and of the restricted scope for such ability at Horbury, removed to York. There was at this time at York a speculative builder called Carr, who, in partnership with his brother-in-law Charles Mitley, a statuary, had bought the ancient Davy Hall, and on its site had erected a street of houses of uniform design which are still standing. In honour of the Duke of Cumberland who entered the city after quelling the Rebellion of 1745, just as these houses were being roofed, the owners christened them "Cumberland Row."

Whether this Carr was related to John Carr and was the cause of his migration to York, I do not know. But the speculation failed, and the builder died shortly after, a disappointed man. His fate may have been a warning to his younger namesake, for throughout his long and busy life Carr never ventured upon any speculative scheme—nor had he any need to do so, for he quickly gained employment, and soon he had the field to himself. Indeed no other architect would seem to have done work in Yorkshire when once Carr had established himself in the confidence of his fellow-Yorkshiremen.

James Paine, beginning with Nostell Priory, when he was only nineteen years old, had designed a great deal of work in Yorkshire in the 'forties, and it is possible that Carr, then twenty-one years of age, may have worked upon Heath House close to his home, since it was built from Paine's design in 1744. Carr subsequently designed the wings which were added to this house ; and after 1755 Paine did no further work in Yorkshire.

When Carr settled in York just before the middle of the eighteenth century, it was in point of population as well as by tradition the metropolis of the north. It was the centre of the Church

life of the Northern Province, and the Reverend Lawrence Sterne could be seen on most days of the week shuffling through the streets and collecting materials for *Tristram Shandy*, several of whose characters—notably "Dr. Slop"—were caricatures of well-known York people. Dr. Fountayne was just entering upon his leisurely fifty years' tenure of the Deanery at York, the same period as was covered by Carr's architectural activity in the city. Lord Burlington had been the Lord Lieutenant, and his headquarters were still at York. His devotion to building is shown in the Assembly Rooms, which contain a fine and impressive interior, and in the Mansion House. Drake, the local historian, in the dedication of his *History of York* to Lord Burlington, assures his lordship that by his taste and by his buildings he has rendered York "more Roman than it was in Roman times." The state of the roads was at that time so bad that the journey to London was an adventure to be talked of rather than repeated, and consequently the county



HAREWOOD HOUSE, FROM THE SOUTH.

families of the north flocked to York for the season. There are many big Georgian houses in the city in which they stayed, and for the design of some of these Carr was responsible. Social interest centred in the race-course on the Knavesmire, and the erection of the grand-stand there marked the beginning of Carr's architectural success.

Carr is first heard of in York as the builder of Kirby Hall at Great Ouseburn in 1750, the designs for which were supplied by Lord Burlington and Morris. It is a stately stone house of severe and strictly Palladian aspect with the *piano nobile* on the upper floor.

In 1752 the York Corporation voted £88 to be paid to Carr for enclosing the Pikeing Well with an ornamental building; £25 was to be returned to the Corporation as redemption money for the freedom of the city. But some hitch seems to have occurred, for he did not become a freeman until five years later, when he is entered on the rolls as "John Carr, stone-cutter."

The stables at Harewood House were built in 1755; Sir William Chambers, then a young man just returned from Italy, was the architect, and Carr is traditionally supposed to have been

the builder. Again, the building of the west wing of Castle Howard, the designs for which were supplied by Sir William Robinson, is attributed to Carr.

In 1754 the grand-stand on the Knavesmire was designed and built by Carr. It was paid for by the issue of five-guinea admission tickets which rapidly appreciated in value. The grand-stand was (for it is now pulled down) a broad and simple piece of Palladian design, and it gave the greatest satisfaction to his patrons. Lord Rockingham, who was the chief promoter, was delighted with it, and when ten years later George III. contemptuously dismissed him from the office of Prime Minister, he gladly returned to the more congenial atmosphere of the grand-stand at York. Rockingham remained a good friend to Carr throughout his life, and the other country gentlemen, who appreciated the amenities of the grand-stand, followed his example and employed Carr as their architect to the exclusion of anyone else.



HAREWOOD PARK: DETAIL OF ENTRANCE GATEWAY.

Henceforward Carr seems to have ceased to practise as a master-mason and to have become solely a designer of buildings. How did he gain the necessary knowledge, skill, and experience to fit him for his new rôle? He had no opportunity for foreign travel, and his only contact with architects hitherto had been that of a master-mason, receiving their instructions. His origin and upbringing had been a thoroughly practical one, and the sound building tradition which still existed in the country in the early part of the eighteenth century had come to him at first hand from his ancestors, who were all masons by trade. In his youth he had seen the straightforward work which James Paine was doing in the West Riding, and on his arrival at York he had the advantage of carrying out work under Lord Burlington and one of his professional architects. If the numerous pattern-books then existing and his own shrewd common-sense are added to these qualifications, we have, I think, the whole of the equipment with which Carr started on his architectural career. His training equally explains the severe limitations which are so noticeable in his designs, the excellence of his masonry, and the practical character of his planning.

Prosperity came to the landowners of Yorkshire late, but it came abundantly in the last half of the eighteenth century, and the merchants and manufacturers of the West Riding were already rising to sufficient importance to require to be housed in a dignified and fashionable way. The demands made upon the knowledge of the architect by the noble, the squire, or the merchant were not very exacting. Lord Chesterfield in 1749 had advised his son when at Vicenza "to employ three or four days in learning the Five Orders of Architecture, and you may know all that you need know in that time—Palladio's own book of Architecture is the best you can make use of for that purpose, skipping over the lowest mechanical parts of it such as the materials, the cement, etc." So we find that Carr, busy with innumerable houses great and small, was permitted, so

long as he gave his clients well-built houses and spacious rooms, to content himself with a very ordinary standard of design.

The first houses which Carr designed were in York itself—large red brick buildings which still look solemnly out into the narrow streets and rather dwarf their mediæval neighbours. There are two such houses in Castlegate; one is built up to the street and contains elaborate plaster ceilings which show that Carr had ready to his hand at York an accomplished group of plasterers, schooled, probably by Lord Burlington, in a type of design which owed a great deal to French influence. The other house in Castlegate stands back from the street, and it is a happy example



HAREWOOD VILLAGE.

of Carr's "solid, masculine, and unaffected" style. He built for himself a house in Skeldergate which is characteristically plain. The front door is shown on p. 248.

Shortly after the middle of the eighteenth century York began to decline as a centre for the fashionable world, and consequently Carr never had the opportunity which came to another Yorkshireman, Wood of Bath, of grouping several dwelling-houses together in "the grand manner," or of laying out squares and crescents in his adopted city. But in the agricultural districts and in the West Riding he was constantly employed in designing country houses. Arncliffe Hall, near Northallerton [p. 242], is an early and simple example. It is a square block, four stories high. The principal floor is reached by outside flights of steps in the centre of the north and south elevations. These centres are marked by pediments, although the wall is only slightly broken forward, and the break outside has no correspondence with the cross-walls within. Whitewindows, near Halifax, is another early work, and he has here reflected the stern, forbidding

aspect of the alps of the West Riding in his design. All is strictly utilitarian, and no atom of space is wasted.

In the middle of Halifax there exists, though now much mutilated, the great establishment which Carr built for Mr. Rawson, banker and merchant. He dwelt in the centre part, and on one side was his bank, on the other side his warehouse. The large windows in the centre mark the parlour, decorated with plaster work in the florid George II. manner [p. 243].

There are two buildings which form the most important turning-points in Carr's career: the first, as we have seen, was the grand-stand on the racecourse at York. The second was Harewood



HAREWOOD VILLAGE: THE DOCTOR'S HOUSE.

House [p. 244], which he built for Mr. Edwin Lascelles. It brought him into contact with the Brothers Adam. Henceforward his work loses in robustness what it gains in "elegance." The sturdy practical builder, self-educated in the sound traditions of Inigo Jones and Lord Burlington, gains a smattering of the more modern scholarship and refinement of the Adams, and all Carr's later work bears undoubted traces of this influence. Harewood House was begun in 1759, and it took twelve years to build. The Lascelles family had long been settled in the neighbourhood of Northallerton, and the father of Edwin Lascelles had made a large fortune as collector of the Customs in the Barbadoes and as a director of the East India Company. The maiden name of Carr's mother was Rose Lascelles, and she came from the neighbourhood of Northallerton. It is therefore reasonable to suppose that Carr could claim a distant kinship, and this may in some measure have been the reason why the work was entrusted to him. Sir William Chambers hints that there was a competition for the building in the statement in his book on *Civil Archi-*

tecture that his design for a garden-house at Marino " was originally made for one of the end pavilions of a considerable composition, which, among many others, Mr. Lascelles procured for Harewood House." A set of drawings, which are unfortunately without signature, are preserved in the estate office at Harewood. They show an early effort in the direction of the Gothic revival. A complete set of plans and elevations for Harewood House by Adam exist in the Soane Museum. These are so similar to Carr's design that one is forced to the conclusion that Carr was largely influenced by Adam's competition work, and that he merely modified it and supplied the detail drawings. Carr published the designs in *Vitruvius Britannicus* as his own ; but in the eighteenth century this would not seem to disprove the very strong assumption that the initial scheme was substantially that of the Brothers Adam.



ENTRANCE TO CARR'S HOUSE, SKELDERGATE, YORK.

The house consists of a centre with wings, which entirely enclose an area on either side. Eighty years after it was built Sir Charles Barry added attics to the wings and a high balustrade to the central block, removing at the same time the columned portico in the centre of the south front. These additions are particularly unfortunate on the north elevation, as there is a sharp rise in the ground from south to north, and the appearance of this latter is now very top-heavy. Harewood House evidently excited contemporary admiration, for only three years after it was completed it was figured by Josiah Wedgwood upon an ice pail which formed part of the elaborate dinner service made for the Empress Catherine the Second of Russia.*

The chief interest in the house lies in the fact that the Brothers Adam were called in to decorate it ; and this they did with all the wealth of their new fashion of flat relief in plaster-work. The furniture was executed by Thomas Chippendale, and his bills for the work still exist ; while " Capability Brown," the celebrated exponent of landscape gardening, designed the lay-out of the grounds. Carr was thus brought in contact with some of the most fashionable designers of the day, and he learnt, as all his subsequent work shows, a great deal from each one of them.

But the village of Harewood [pp. 246, 247] is much more characteristic of Carr than the house. It originally clustered round the church, but Mr. Lascelles moved it from his new park and rebuilt it as a model village—the only instance, so far as I know, of such in the eighteenth century. The semicircular arch is almost the only form of decoration, and by its means the cottages are marshalled into regular blocks, with the larger houses of the doctor and the agent set between. The result is very unlike one's conventional notions of an English village, but the effect is undeniably fine and dignified.

After the building of Harewood House Carr's position was supreme and undisputed in the North of England ; but before dealing with his later work, let me speak of an incident which has

* By the courtesy of the publishers of *The Imperial Russian Dinner Service*, by Dr. George C. Williamson (George Bell & Sons, 1909), the writer was able to show a slide of this ice-pail.

been copied into all the notices of Sir William Chambers' life. It is the story, the authority for which is Hardwick, a later pupil of Chambers, that in or about the year 1755 Lord Bute was looking for a tutor in architecture for the young Prince of Wales, afterwards George the Third; that Lord Bute consulted Carr, and that the latter recommended Chambers for the post, thus laying the foundation of his fortunes. The story is on the face of it improbable, since two years later Carr was described on the York Freeman's Roll as "a stonecutter," and it is unlikely that his opinion would then be sought on such a matter as the architectural education of the heir to the Throne. Moreover, Thomas Gandon, who was the first pupil of Chambers and therefore in his office at the time, states in his autobiography that Chambers was introduced to Lord Bute by John Gwynn, a well-known London architect of this period. This contemporary evidence disposes, I fear, of the picturesque story that Carr's opinion was consulted so early in his career on matters of high architectural moment or that he was the friendly means of the advancement of his famous fellow-architect.



DENTON PARK: NICHE IN BREAKFAST ROOM.

A little higher up the river Wharfe than Harewood Carr built Denton Park, a typical example of his larger houses, with wings attached. The masonry is faultless, the design cold, regular, and uncompromising. There is the usual entrance on the south front direct into a large square hall. Carr seldom built a porch to his entrances. There is his favourite device of a bay window extending the whole width of the room and balanced on the other side by chamfered angles, in which, when the room was intended for a dining-room, the sideboards were placed. The planning of the earlier part of the century had been much improved upon: it was no longer necessary to go through one room to get to another, the living rooms being now always entered from a hall or corridor.

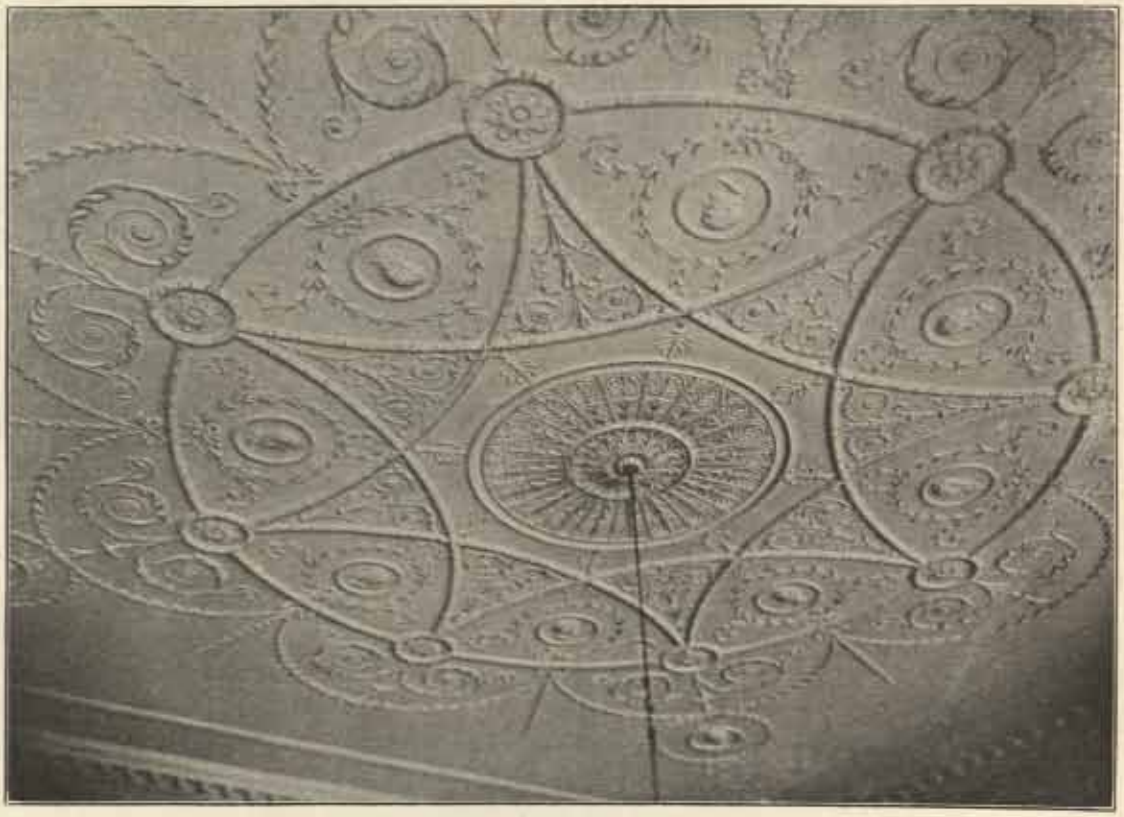


DENTON PARK: DINING-ROOM MANTELPIECE.

In the interior decoration of Denton Carr had thoroughly assimilated the manner of the Brothers Adam, and his ceilings, door

architraves, and mantelpieces can hardly be distinguished from theirs. These rooms when sparsely furnished, with polished floors and lighted by wax candles, must have suited exactly the atmosphere of the time. But they were comfortable rooms also, for Carr never tried experiments, and his experience made every detail exactly right, whether it was the height of the window-sill or the size and position of the fireplace. The floors were of double thickness, and the cross walls were usually very thick, with double doors, so that his houses are practically sound-proof.

Constable Burton, in the North Riding [p. 252], is a smaller house, without supporting wings. The principal floor is on the first story, and the columned portico with the flight of steps forms a fine approach to the entrance hall. The plan is compact and good. The worst feature of square plans such as this is the difficulty of lighting from the outside a sufficient number of

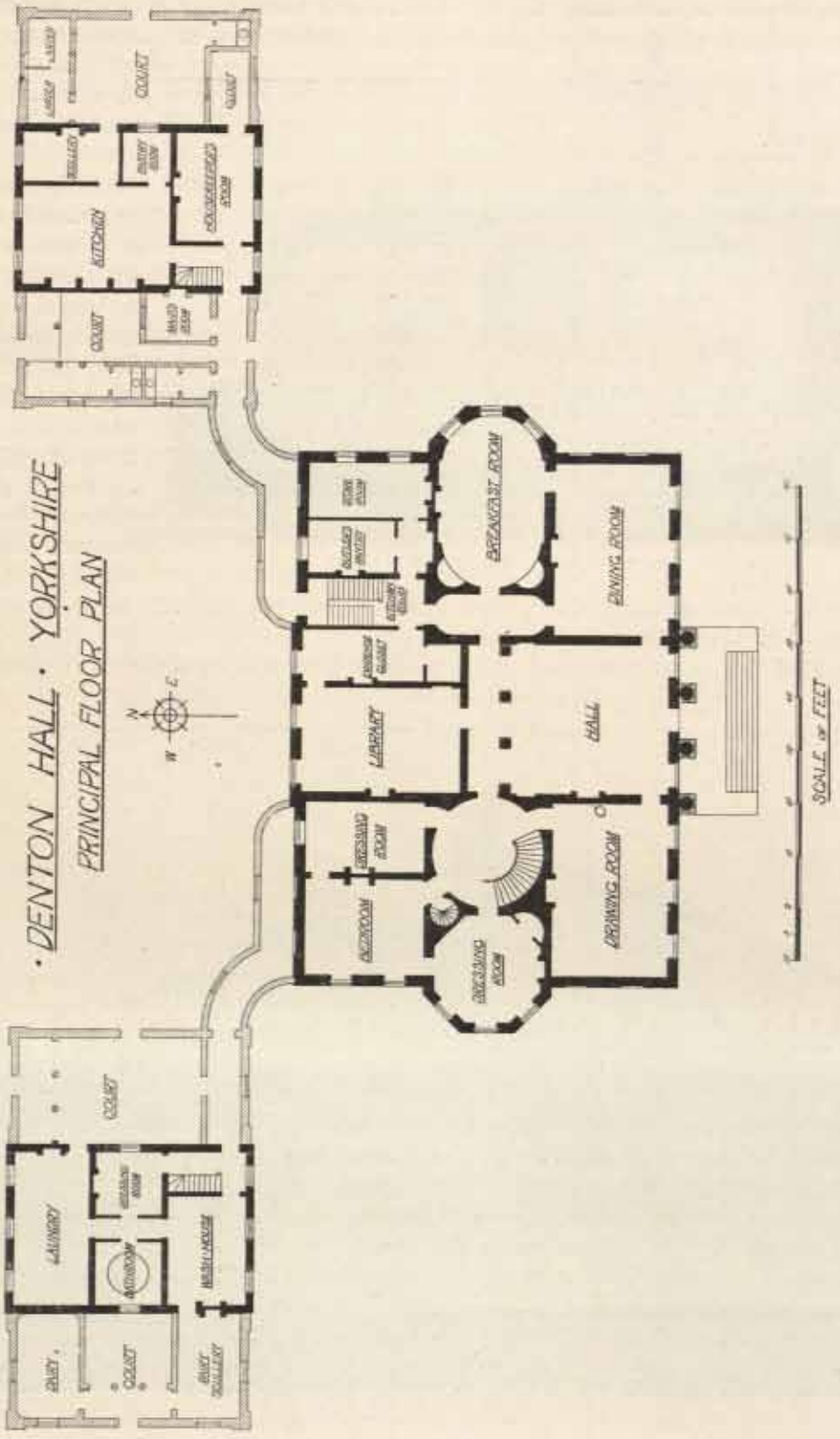


DENTON PARK: CEILING IN HALL.

bedrooms: Carr was driven to top-lighting for dressing-rooms and closets. This point is well illustrated by the plan of Eastwood House, Rotherham. Fortunately for him, the demand for bathrooms and sanitary arrangements hardly existed.

When the principal floor is, as at Constable Burton, so far from the ground the inconvenience of the outside steps on a rainy night is obvious. Carr seems to have been conscious of this defect, for at Basildon Park, a large house which he built in Berkshire, he brings the steps inside the loggia under the portico.

Basildon Park is the only example of Carr's work in the south of England. It was built for a Yorkshireman, Sir Francis Sykes, who had returned from the East Indies as a "nabob." His portrait by Romney hangs in a house in Yorkshire which Carr designed—Aston Hall, near Rotherham [p. 252]. This house was bought by another nabob, Mr. Verelst, from the Earl of


DENTON HALL · YORKSHIRE
PRINCIPAL FLOOR PLAN
N
W
E
COURT
KITCHEN
HOUSEKEEPER'S ROOM
COURT
LAUNDRY
COURT
BREAKFAST ROOM
DINING ROOM
LIBRARY
HALL
DRAWING ROOM
BEDROOM
DRESSING ROOM
SCALE OF FEET

Holderness before Carr had finished it. Aston Hall is very similar to Constable Burton in plan and elevation: originally a twin flight of steps ascended direct to the entrance on the upper floor, but it has since been removed and an internal stair has been substituted. The insufficiency of bedrooms has been remedied by the addition of a side wing, to the detriment of the appearance of the house.



CONSTABLE BURTON, FROM THE WEST.

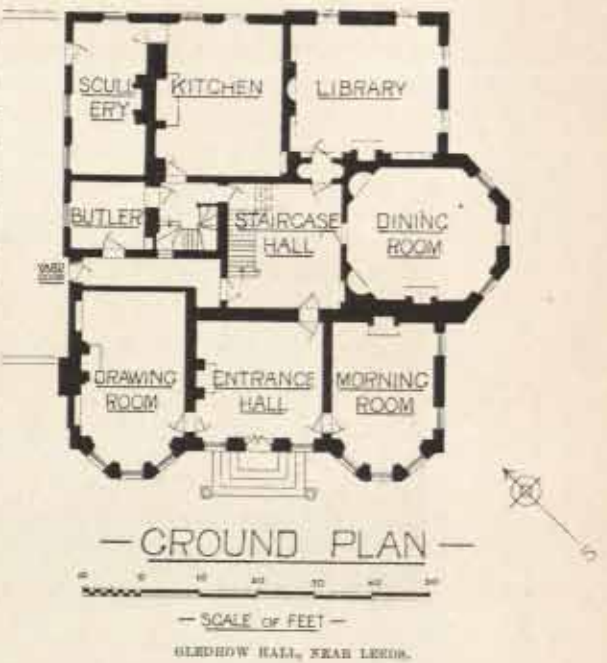
At Gledhow Hall [p. 253], near Leeds, Carr has placed his principal rooms upon the ground floor, as was his practice in nearly all his later houses. There are an unusual number of bay windows. The illustration of the south elevation shows how severely these houses suffer in appearance from the absence of the original bars to the windows.

In 1767 the project of building an Infirmary for Leeds was set on foot. Carr was approached



ASTON HALL, FROM THE NORTH-EAST.
Photo. by J. R. Wigfull [A.].

by the committee, and he wrote from Aston Hall, "I can perhaps be of use to you in composing the necessary conveniences which are requisite in such a building with some degree of art, but have not the opportunity of conducting the execution for you." Although the building has disappeared, the minute books of the Building Committee are still preserved in the present Infirmary, and all the contracts, the prices, the various troubles, mistakes and delays are minutely set forth, together with Carr's receipt for his fees in connection with the work [p. 254].



GLEDHOW HALL, NEAR LEEDS.

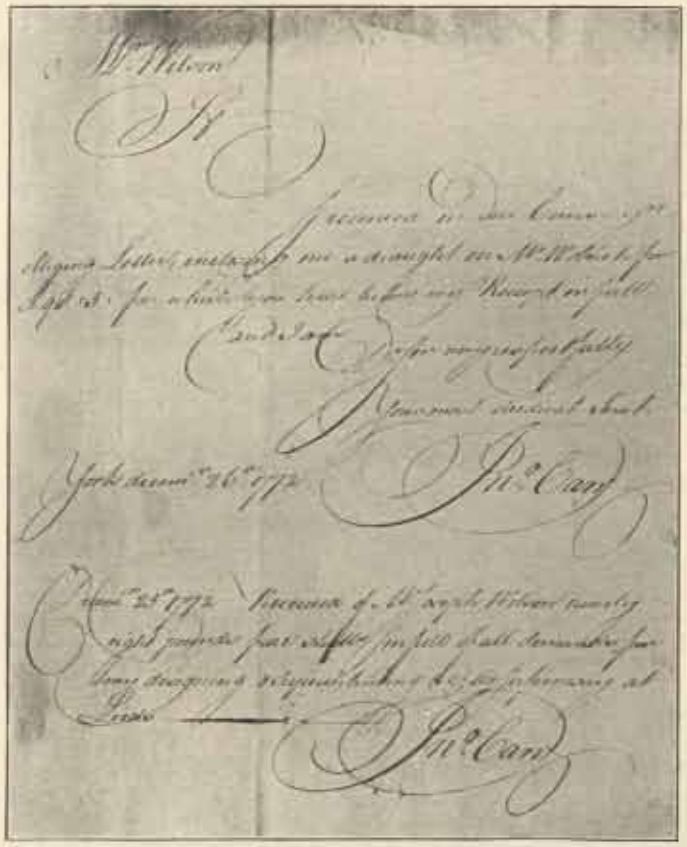
One of the latest examples of Carr's domestic work is Hackness Hall, near Scarborough [p. 255]. It is one of the largest houses of his single-block type, but beyond a greater tendency to refinement of detail, due to the Greek revival fashion, and an unhappy attempt to broaden his windows, it is similar to the work he was doing thirty years earlier.* The house itself is a fine example of mason's work, as is the case with all Carr's buildings. He was always at the greatest pains to select the very best stone and to use it with knowledge and judgment. Almost wherever he built in the country districts of Yorkshire he was fortunate in finding excellent building stone ready to hand.



GLEDHOW HALL, FROM THE SOUTH-WEST.

* Hackness Hall was unfortunately burnt down on 16th January 1910 (the day before this paper was read).

For buildings in the neighbourhood of towns, he seems in several cases to have preferred brick. In Wakefield, for example, so near to his native village where he had learnt his mason's craft, he is responsible for some of those great plain, comfortable-looking brick houses in Westgate which give so intimate an idea of the steady, permanent prosperity of the Yorkshire merchant in the last half of the eighteenth century. Thornes House [p. 255] is one of these brick houses, now a good deal altered, the balancing wings having been entirely connected with the central Block. At Horbury itself there is a small house—Carr Lodge—which has been nicknamed "Little Thornes House," since the style and design are so similar.



CARR'S RECEIPT FOR HIS FEES IN CONNECTION WITH THE BUILDING OF LEEDS INFIRMARY.

Carr also made additions to many existing houses, to the Elizabethan Farnley Hall and to the late eighteenth century Wentworth Castle, for example. But he never attempted to introduce any other style than his own. He planted down his additions exactly as and where practical requirements dictated. The Gallery at Wentworth Castle and the Entrance Hall form part of an addition by him to the original house. This addition was praised by Horace Walpole, who wrote, "Mr. Gilpin sillily could see nothing but faults there. The new front, in my opinion, is one of the lightest and most beautiful buildings on earth," and, he adds, with a characteristic touch, "pray, like the little Gothic edifice, and its position in the menagerie."

The stables of an eighteenth-century Yorkshire establishment almost rivalled the house itself in importance. Carr seldom made the mistake of his predecessors who attempted to group them with the house in a wing whose balancing partner was put to some totally different purpose. At Gledstone-in-Craven, a stone house with wings which stands practically unaltered in any particular, the stables form, as usual, a square block situated at some distance from the house. But within these is the unusual feature of a circular stable-yard with a brick-vaulted, covered way running all round it. Carr had evidently been studying the designs of Inigo Jones for the Palace at Whitehall.

At Wentworth House, which is entirely distinct and at some distance from Wentworth Castle, Carr designed for his early patron Lord Rockingham what were perhaps the most magnificent stables in Europe [p. 256]. They are built round a quadrangle and entered through a fine gateway of the Doric order. Within all is spacious and substantial. The mangers are niches of solid stone. This building shows Carr at his best; it is work of the simple broad type in which he delighted, and with which he was very much at home. Similar praise cannot be given to the mausoleum [p. 257] to Lord Rockingham, who had died while Prime Minister in 1782. It stands in the



THORNES HOUSE, FROM THE SOUTH.

middle of a plantation about a mile away from Wentworth House. Within there is a statue of Lord Rockingham by Nollekens, and in niches round the walls there are busts of eight of the Whig leader's principal supporters.

Carr himself was a moderate Whig in politics, but he confined himself to civic duties, and he was for long an Alderman, and on two occasions Lord Mayor, of York. In 1770 he read with contented interest in the serene atmosphere of the Mansion House at York of the famous struggle



HACKNESS HALL, FROM THE NORTH.

between Parliament and Crosby, the Lord Mayor of London: a struggle which ended in Crosby's committal to the Tower.

The portrait of Carr by Sir William Beechey [p. 260] shows him as a genial, shrewd, and kindly old man. On a table by his side are the plans of the Crescent at Buxton, designed for the Duke of Devonshire. We may conclude, therefore, that this was a favourite work of his. More interesting is the great riding school which is behind the Crescent, and which is now a hospital.

In York, the County Lunatic Asylum with its simple lines and pleasant colouring makes a dignified termination to a long strip of park. The semi-circular relieving arches of brickwork over the first-floor windows form one of Carr's favourite motifs.

The Court House and Debtors' Prison at York, which face each other on either side of the Castle Green, and which are precisely similar in design, represent the only opportunity which Carr was given in York for regular and formal grouping. The plan of the Court House [p. 258] was



WENTWORTH HOUSE: STABLES.
Photo. by J. R. Wigfull [A.].

modelled upon that of the basilicas of ancient Rome. The central doorway opened upon a columned hall, and at either end were two courts of justice, the civil court on one side and the criminal court on the other, each surmounted by a dome containing elaborate plaster work. Originally the building was open from end to end and the effect must have been very stately. Unfortunately the various parts of the building have now been partitioned off: a development which was inevitable in view of the horror of draughts which is a characteristic of the judicial temperament.

The Town Halls of Lincoln, Newark, and Chesterfield show Carr's usual careful treatment and form an appropriate setting for the slow, deliberate municipal life of the period.

In 1790 Carr obtained permission to pull down the village church at Horbury, where he had worshipped as a boy and where so many of his ancestors lay buried, and to build an entirely new church of classic character at his own expense. He had been successful in his work, he had amassed a large fortune, and he had been twice Lord Mayor of York. So in his native village—with mixed motives of piety and pride—he built the existing church at Horbury—

"PIETATIS IN DEVM ET AMORIS IN SOLVM NATALE MONVMENTVM
PROPRIIS SVMPTIBVS EXTRVXIT
IOHANNES CARR ARCHITECTVS"

as the inscription in the pediment records.

Its poverty of design and want of appropriateness to its purpose reflects the spirit then existing in the Church of England. The interior is decorated with enriched plaster work of a flat and delicate type. At the time of its opening the church was regarded as a triumph of artistic skill. A local paper of that date reported that " this beautiful building is allowed to be the handsomest

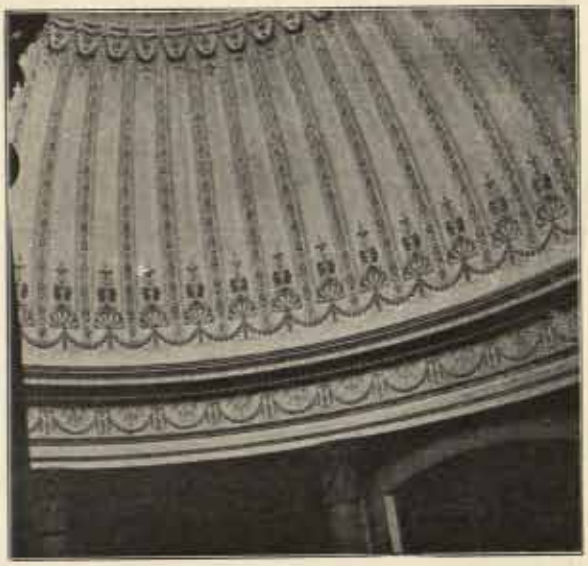


WENTWORTH MAUSOLEUM.
From a photograph by J. R. Wigfull [A.].

building of its size in the country. The spire is truly elegant and the body of the church is rendered perfectly commodious by the judicious arrangement of the sittings."

Carr made occasional excursions into Gothic, and the aisles of Dewsbury Church and the east part of Sheffield Church show that he neither understood nor appreciated Gothic architecture. His original drawings exist for the work at Sheffield Church. At the Soane Museum there is a bound set of drawings copied from Batty Langley's work on Gothic architecture, and on the frontispiece of this Carr's name is written. Whether or not Carr made these copies himself, the

drawings for Sheffield Church show that he had been a student of Batty Langley's works. Carr also made a survey of York Minster for Dean Fountayne. He restored the roofs, employing as his clerk of works the son of the Archbishop's gardener, Joseph Halfpenny, who took advantage of the scaffolding to make those careful drawings which were afterwards published as "The Gothic Ornaments of York Minster."

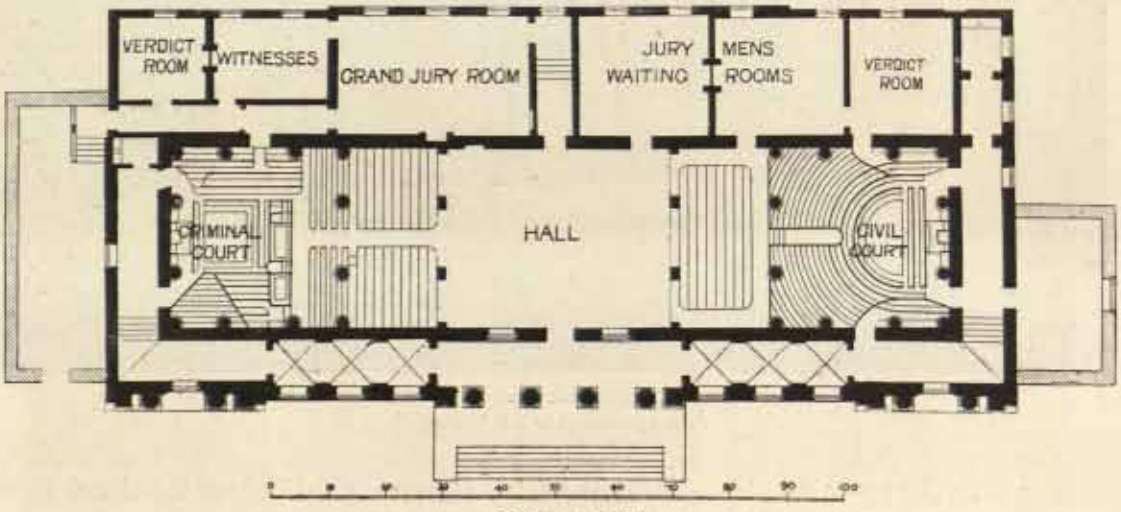


THE COURT HOUSE, YORK: DOME.

The last work that Carr designed was the Entrance Gateway to Harewood Park [p. 245]. It dates from 1801, and is a fine piece of mason's work.

Evidences of Carr's connection with the municipal life of York remain in the Mansion House there in the shape of some silver plate which he gave to the Corporation. One is a large centrepiece with figures on the handles and lid. The inscription reads that it was "presented to the Corporation of York by Alderman John Carr, with great respect, 1794." There is a lithographed portrait of Carr, drawn in 1796 by George Dance, the architect of Newgate. It shows his face in profile.

In 1791 he was elected one of the nineteen original members of the London Architectural Club, who used to meet once a month at the Thatched House Tavern, not to listen to a paper, but for the more satisfactory purpose of dining together. So exclusive was the Club that future candi-

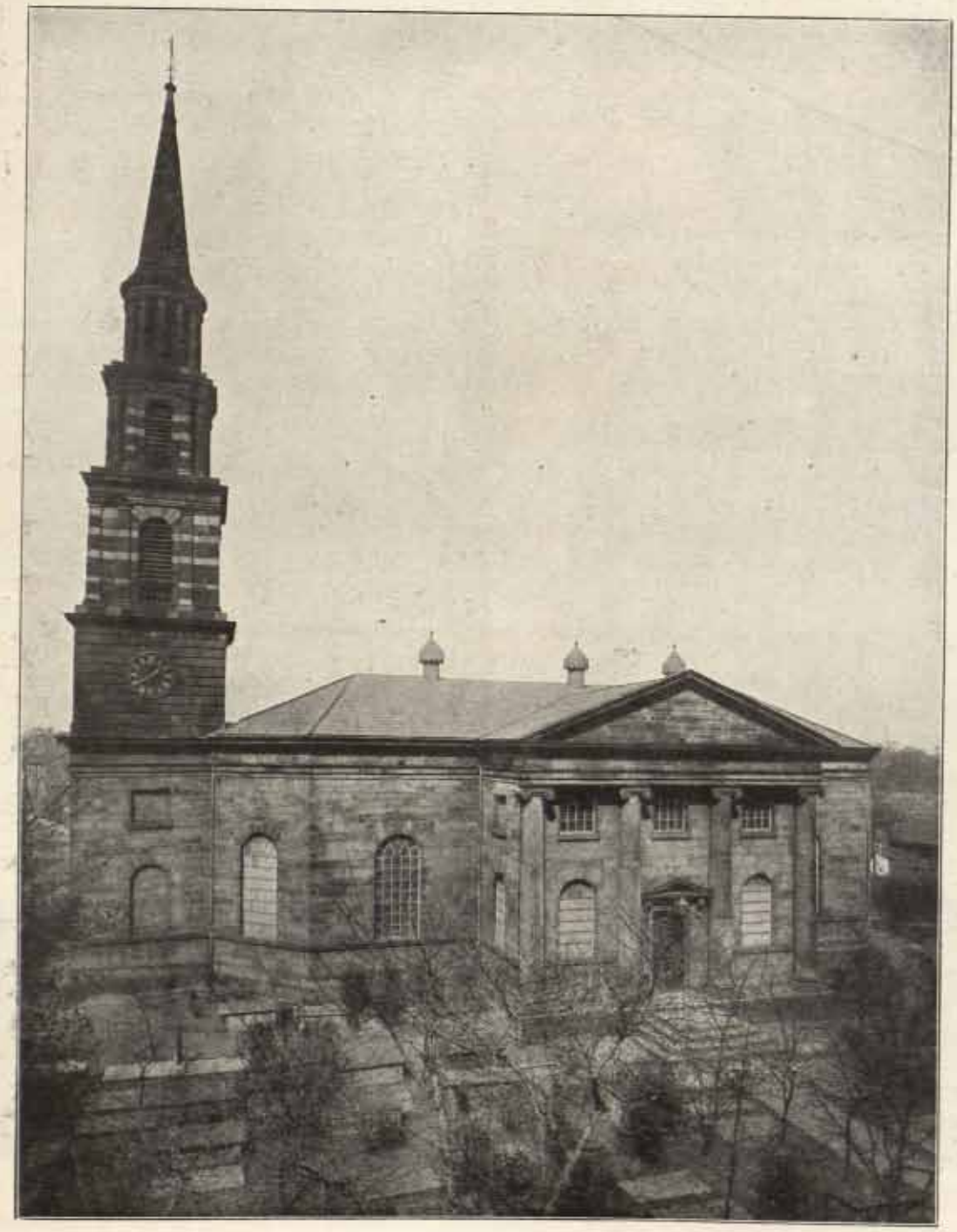


THE COURT HOUSE, YORK.

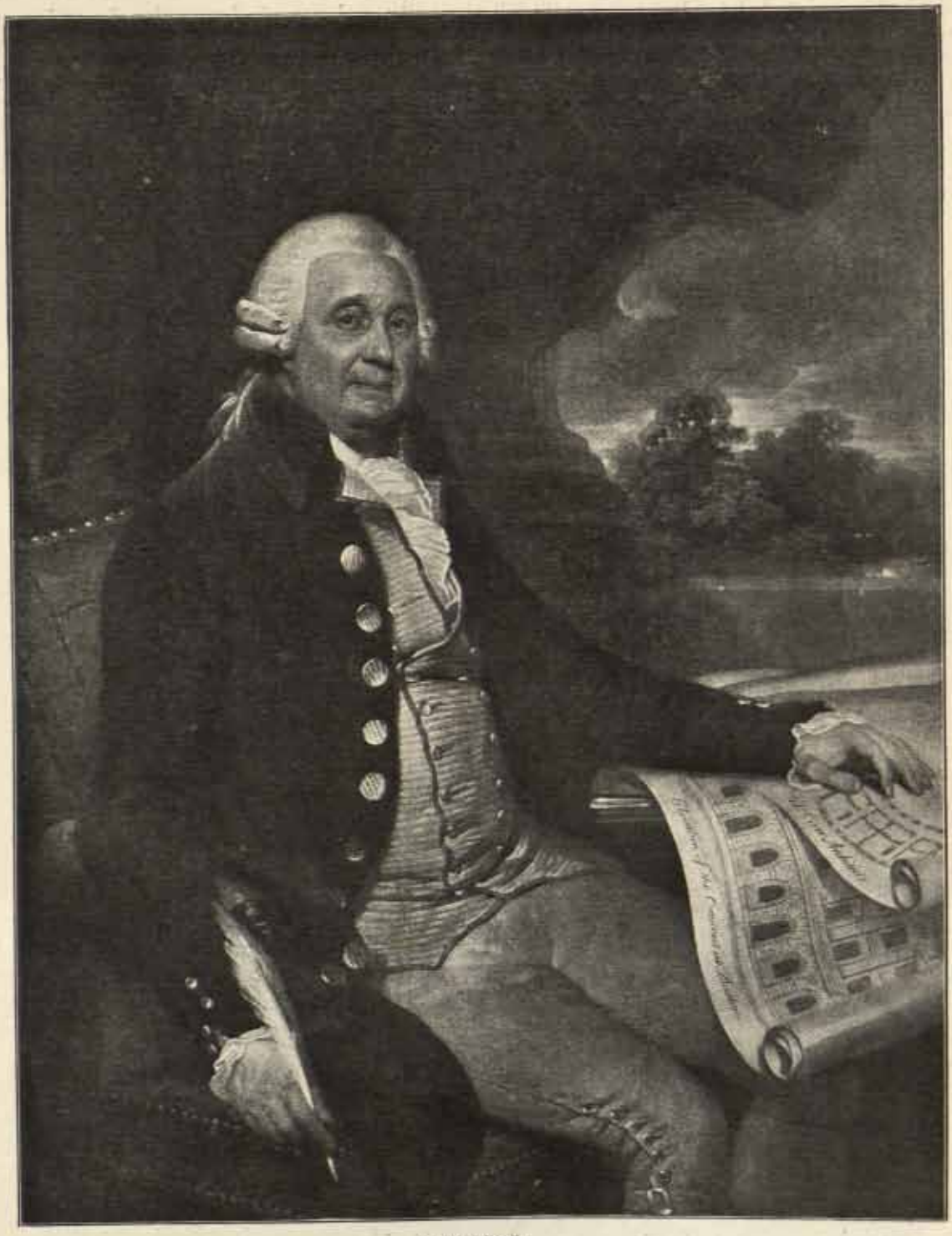
dates were to be Academicians or gold medallists in Architecture, and one blackball in the entire ballot was to exclude.

During the last years of his life—he died in 1807 at the age of eighty-four—Carr relinquished

his work and retired to a country life at Askham Hall, a house which in his early days as a mason he had helped to build. But he was still full of vitality, and seems to have enjoyed nothing so much as his long, leisurely driving tours, when he would show his nieces the work he had done in various parts of the country, or guide them to the fine scenery of the Lakes, and the North Riding,



HORBURY CHURCH.



CARR OF YORK.
(From a portrait by Sir William Beechey at Browsholme Hall, Yorkshire.)

or take them through some of the great workshops which were rising in the industrial districts. At the Carron Ironworks, for instance, his niece records in her journal that "the great casting-rooms are very astonishing, from the roaring of the bellows and the dreadful fires, out of which the liquid metal runs into the moulds and is cast into cannons, pots, grates, and various other things, by such figures of naked men as we had never before seen." The aspect of the country had greatly changed since Carr began his long journeys on horseback to look after his various buildings. The roads from mere bridle-tracks had become wide and well-made arteries for the mail-coach traffic. He had himself designed many of the new bridges, such as those at Boroughbridge, Richmond, and Ferrybridge. The population had nearly doubled itself; quiet market towns were becoming large industrial centres, and the old traditional system of trade apprenticeship and continuity of type in method, workmanship, and design was fast dying out. But Carr belonged to the old, leisurely order of things. He accepted the traditional style and method which he found at the beginning of his career, and was content merely to maintain the high technical level of workmanship for which the eighteenth century is famous.

And so, if Carr's buildings are sometimes dull, they are always sensible and fulfil Inigo Jones's requirement that architecture should be "solid, masculine, and unaffected." He himself would probably have been content with such a verdict. He merely claimed, as he wrote to the Board of the Leeds Infirmary, to be able "to arrange the necessary conveniences with some degree of art."

DISCUSSION OF MR. KITSON'S PAPER.

MR. ERNEST GEORGE, A.R.A., *President*, in the Chair.

MR. J. A. GOTCH, F.S.A., said he had very great pleasure in proposing a vote of thanks to Mr. Kitson for his Paper. All who were interested in the history of architecture must be grateful to those gentlemen who undertook to read a monograph on any special architect who had achieved a reputation. To have accurate facts carefully marshalled was an invaluable assistance to any one interested in the continuity of architecture. On one point, perhaps, Mr. Kitson had done an injustice to the architecture of Yorkshire, in that he only pointed to two periods of considerable building in that county, and had omitted the very large amount of building that was done in the later sixteenth and earlier seventeenth centuries. The hills and dales of Yorkshire offered many choice examples of charming little mullioned buildings highly suitable to the surroundings in which they were built. The history of Carr of York was a very interesting one. He seemed to have been one of the last of the race of mason-architects who did so much towards filling England with beautiful buildings. Of course, in earlier days—in some of those sixteenth and seventeenth century days that he had mentioned—it was usually the mason who was responsible very largely for the design and detail, if he was not responsible for the actual planning—in some of the smaller buildings probably he was responsible for both; but in almost all buildings, even the largest, it was the mason who was responsible for the detail; and here we have in Carr a gentleman who combined both branches. He seemed only to have been thirty-one years old when he designed the Grand Stand at York and cast off the slough of a mason and appeared as a fully developed architect. One reflection his career brought before them was how much less training was necessary in those days for an architect than was necessary at the present time. That point was emphasised by the awards of the Institute prizes which had been read before them that evening. In the present day the young architect, like Goethe's Wilhelm Meister, had not only to have his *Lehrjahre*, his years of learning, but he had to have his *Wanderjahre*, his years of wandering abroad to gather experience. In the days of Carr, life was far less strenuous, and the architect got off more cheaply, both in point of money and in point of time, in acquiring the knowledge that was sufficient for his purpose. Then, again, recent decisions of the Law Courts indicated the additional responsibilities that the architect had to bear at the present day—in fact all the circumstances of the time seemed to point to the eventual establishment of a firm or limited company to carry on architecture, one member of which should be the designer, another the constructor, versed in all the various and most modern methods of construction, and another one a lawyer—and very often they might have to add to their number a person well versed in natural history.

Quite recently he had been asked to give advice as to the presence and ravages of a most unpleasant beetle which threatened to drive the tenants out of a house; in fact they said that unless the evil was cured they must go, and then some contemplated alterations would not be carried out; so that every inducement was laid upon the architect to ascertain what this beetle might be, what its habits were, where it laid its eggs, and when would be the best time to attack it. Then again, there was another branch of natural history that the Institute was just taking up—viz. the question of dry rot. All these things which were now thrown upon their shoulders Mr. Carr was happily entirely free from. The training he got was quite sufficient, however, for the very simple requirements of his time. There was no complexity of planning then. The dividers which Mr. Kitson mentioned were the architect's principal instrument; as long as he got his spaces pretty equally divided, and the façade nicely proportioned, that was half the battle; he then fitted his plan on to the façade, which was very easily done, because it had no complexity about it. There were no sanitary requirements in those days; the architect had not to consider the various demands of his principal apartments as compared with his sanitary apartments, because the latter did not exist. No house in those days had an ignoble side. In this respect the eighteenth-century house differed very considerably from its predecessors. In the large sixteenth and seventeenth century houses there was as a rule in front of the principal part of the house a large courtyard formed of minor offices where the servants were sometimes lodged, where the outside servants undoubtedly lived and did their work, and it was thought no disadvantage to a fine house to approach the main structure through buildings which were devoted to more or less ignoble purposes. That idea entirely disappeared in the eighteenth century, and houses were built which had all the façades of equal or very nearly equal importance. That simplified the question of designing a fine house very much indeed; their plans were simple and the elements of design were very simple—so simple that the pattern book of those days was a very great assistance to architects. It is a question how far the use of pattern books was a disadvantage; it prevented originality; but in the present day it was just possible that we suffered too much from originality; perhaps there was a little too much of the originality which was suggested by our sketch-books. In those days there was nothing unexpected. When one turned round the corner of the house one knew exactly what would be found there; in the present day, when one turned a corner of the house one generally found something that was unexpected and very likely something that was undesirable. Those pattern-books had the further advantage that they led to the development and cultivation of one style instead of, as at the present day, half-a-dozen or more. In those days all designing minds were concentrated on one route instead of following a number of different routes. Perhaps a revolt from our own originality was being indicated today by the prevalence of the rough-cast and colour-wash style, which certainly avoided those fantastic efforts at design which marked some of the work of fifteen and twenty years ago. Turning to Carr himself, he should be rather glad to know from Mr. Kitson whether he designed any of the work at Wentworth so late as 1806, because in 1806 he was within one year of his death, and in a recent very admirable account of Wentworth House that appeared in *Country Life* a good deal of the work inside Wentworth was attributed to him—that is, Wentworth House where he designed the stables.

MR. KITSON: No, not Wentworth House—Wentworth Castle.

MR. GOTCH: There seemed evidently as much mixture between Wentworth House and Wentworth Castle as there was between Burton Constable and Constable Burton. He had always understood that Burton Constable was a mullioned house. But that was totally different from the Constable Burton shown upon the screen. There were thus two instances of important houses which the ordinary person who did not have the advantage of living in Yorkshire thoroughly mixed up. Mr. Kitson might perhaps explain this. Mr. Kitson had mentioned the fact that Carr was a member of a Society of nineteen architects, about the close of the eighteenth century, in London. When he (Mr. Gotch) was a youth, an uncle of his told him that there used to be only twelve architects in London, called the twelve apostles; but apparently there were nineteen; so he supposed these seven were a sort of apostles to the Gentiles, like Carr, living away from the metropolis of Jerusalem. There was one other thing he should like to mention. On the wall was an old picture of Harewood House, lent by Mr. Batsford, which was extremely interesting, because it showed Harewood House in its original state, and it showed the conception of the time of what an English country house should look like. It would be seen that the house was a mere incident in the landscape; it was stuck down, as it were, in a field; and to the mind of the painter, and perhaps to the mind of the architect—certainly to the mind of Capability Brown—it was as important that there should be the fine group of trees seen in the picture as that there should be a house. The idea that the house should be wedded to its surroundings in any formal manner was, of course, wholly ignored; the whole notion was a landscape in which a house happens to appear. He thanked Mr. Kitson sincerely for his extremely interesting Paper, and he would end by saying that, after all, Carr's ambition was that of most of them, even if circumstances limited the circle of their ambitions, and that was "to treat the necessary

conveniences of a building with some degree of art."

Mr. H. A. TIPPING, F.S.A., said he had very much pleasure in seconding the vote of thanks. Everyone must have been much interested in knowing more than they knew before of Carr of York. He wished there were many architects of the present day who were as good students of the architects of the past as was Mr. Kitson, and would inform us concerning them. We really knew very little about them. Take Carr of York himself—he was dismissed in the *Dictionary of National Biography* in a very few lines indeed. They would all have been interested in what Mr. Kitson said of the origin of Carr of York—his origin of a stonemason's family. People had been very apt in rather a loose generalising way to say, as Mr. Gotch so rightly pointed out, that in mediæval times, and even in Tudor times, the stonemason, the master freemason, was the architect of great houses, like Smithson was at Wollaton. We have been inclined to say that after Inigo Jones all this was changed, and from the day of Inigo Jones forward came the time of the learned architect who had been to Italy and elsewhere and worked specially at the drawing-board. We see from the origin of Carr of York, who lived into the beginning of the nineteenth century, and from that of other of his contemporaries, that their origin was largely in the workshop and not at the drawing-board. Many instances of that would be found during the eighteenth century, the period in which Lord Burlington and the *virtuosi* took such an active part, and men like Kent, Gibbs and Campbell visited Italy and went to Rome to drink there from the very sources of classic and Palladian art. Yet many would be found even at that time who shared with Carr the origin of the stonemason's yard. He had come across a very interesting case of the kind the other day, with regard to Erddig Park, near Wrexham, where the architect called himself a freemason—the same title of free master-mason that no doubt described Carr a little later on, and that earlier Smithson at Wollaton called himself by. Thomas Webb, freemason of Middlewich, in Cheshire, had nothing to do with masonry—that is, with erecting the work—but was as much an architect as any of those present were that evening. Luckily, at this place, Erddig Park, there were preserved the original agreements not only with the architect, but with the stonemason, bricklayer, and carpenter, showing that they were all perfectly separate people; and this man, although he called himself freemason in this agreement, was really an architect, and was paid a fee, not for erecting the house, but for what was then called "making a draught of the case of the house." And the manner in which they paid him was also rather interesting. It was always a question whether the percentage system was a wise one—many clients demurred to it and said that the architect, however great an artist he might be, and however superior to these trifling questions of £ *s. d.*, under the percentage system was rather inclined to encourage bills of extras. That was not so in the case of Mr. Thomas Webb of Middlewich; there he was paid the fixed sum of £50 for his work, and besides that had meat for himself and his horse. It would be interesting to go through Cheshire records and see whether Thomas Webb (who was no relation to John Webb, Inigo Jones's kinsman) was architect of many Cheshire houses in Charles II.'s time, which was the date of Erddig, just as Carr was in Yorkshire afterwards. Erddig was the only case he had met with in the private records of a private family, and that not in Webb's own county of Cheshire, but a few miles over the border in Denbighshire. But many other men had had the same origin as Carr. Sir Robert Taylor was the son of a stonemason and started life in a more artistic branch of his profession, namely as a pupil of Sir Henry Cheere, who was famous as a maker of lead statues, and Sir Robert Taylor did not become an architect, although he was born some ten years before Carr, until after Carr's career as an architect had begun, having been a sculptor up to that time. Again, there were other Yorkshiremen—Ripley and Kent, for instance—who, though their fathers were not stonemasons, were themselves connected with the building trade or arts connected with architecture. Kent was an apprentice to a coachbuilder, and coach-building and painting at that time were distinctly matters of art. Ripley was a carpenter and Flitcroft also was a carpenter; and so a great number of the best-known architects of the eighteenth century were really at that time carrying out, not a new idea which we suppose dawned with Inigo Jones and then prevailed, but the building ideas of the old craftsmen-designers of mediæval and Tudor times. Carr, he thought, was one of the last of these, and one of the most interesting. A point about Carr that interested him very much was the fact that after all, although there was a great deal to be said in favour of deriving one's information and training, not so much from studentship and the drawing-board, but from the workshop, perhaps in many cases it was against originality. As Mr. Kitson had had to allow, Carr was not an original architect at all; he wanted to carry on the sound tradition that he found—which was a very good thing indeed. But we also want originality, and one noticeable point about Harewood House was the contrast between what was done by the brothers Adam at Harewood House and what was evidently left in the decorative domain to Carr. The brothers Adam were called in to decorate the house, and all the great reception rooms there are, with Lansdowne House and Kedleston Hall, among the very best examples of the brothers Adam style. But the brothers Adam were originators of style; they were looking for-

ward; Carr, on the contrary, always looked back; he went back to those pattern-books which had their foundation with Inigo Jones. Going carefully round Harewood House it would be found that in the lesser apartments, some of the better bedrooms upstairs for instance, the touch of the brothers Adam was wholly absent, and the style was still the style of Kent, Ripley, and other earlier Palladian architects of the school of Lord Burlington in which Carr was trained. He was evidently conservative. The idea arose in his (the speaker's) mind, when Mr. Gotch mentioned that picture as so representative of the general gardening scale and the ideas of environment at the time, of another house that Carr had to deal with, which he thought would show that Carr had some of this conservative tendency as regards the environment just as he had with regard to the elevation and decoration of a house. That was a house that Carr built out of his own county of Yorkshire, in Cheshire, Tabley Hall. Tabley Hall was built at least a dozen years after Harewood House, after Carr must have come across the brothers Adam and Capability Brown; and the approach of Tabley was a very interesting piece of lay-out—it seemed to be very extensive. He would not call it a forecourt, it was more than that. At Tabley there was a forecourt, and the house with its segmental corridors and side wings, and besides the side wings a detached stable. He did not know that he was prepared to agree with Mr. Kitson that the setting of the stables in one of these wings was wrong; in many of our finest houses they were placed there very well. Take Chevening House in Kent. Chevening House still had the form which it originally possessed, and was one of the extraordinarily vast number of houses which were attributed to Inigo Jones. It was later than Inigo Jones, but it was very much in the manner of Inigo Jones, and it had its stables in the west wing; and he should say they were exceedingly well placed there; they were perfectly satisfactory from the practical point of view and from the architectural point of view, and, so far as his own knowledge of the point went, they were perfectly satisfactory from the olfactory point of view. At Tabley they got the fact which Mr. Kitson had so well pointed out, that Carr put his stables quite separately, and this fine house was exceedingly like several that Mr. Kitson had shown on the screen with segmental corridors and side wings, and then, facing the central block but a long way off from it, were the stables. Besides the forecourt they got a formal stretch of drive with elaborate arched entrances. It was a very considerable and admirable lay-out for anyone wanting now to make an approach to a house in the Palladian style, and since Mr. Reginald Blomfield began it they knew how popular the Palladian style had become. It would be a very interesting study for some of the young members of the profession to get the ground plan of this interesting lay-out in Cheshire by Carr of York, which was decidedly based on older traditions of geometrical gardening. It showed the very strong conservative character of Carr of York. On another point he would appeal to Mr. Kitson for further information. It was certainly said by all authorities and in the *Dictionary of National Biography* that Carr continued the great work at Wentworth Wodehouse (not Wentworth Castle), which, as they knew, represented various styles. There was still at that house one of the elevations that was supposed to have belonged to the house of the great Earl of Strafford. Then there was the great front by Flitcroft, and then there were very considerable wings which were supposed to have been built at the beginning of the nineteenth century and were attributed to Carr of York. He should be very glad to hear from Mr. Kitson whether it was a fact that that part of Wentworth Wodehouse was erected as late as that, and whether Carr of York had to do with it. To mention another architect-mason, there was the rather mysterious Smith of Warwick, and he should like to know as much about him as he now knew about Carr of York. Was there any Warwickshire architect who could tell them about Smith of Warwick? He was not mentioned in the *Dictionary of National Biography*, and he did not appear in Mr. Blomfield's text, though a little note was appended to one of the pages of Mr. Blomfield's most admirable book in which he tells us that Smith of Warwick was one of the two masons connected with Gibbs in the building of the Radcliffe Library at Oxford. Here, then, we get another mason who certainly succeeded as an architect. It was known that he erected buildings in Warwickshire—for instance, Stoneleigh. And he had come across another interesting point not long ago at Wingerworth Park—an extremely fine Palladian house in Derbyshire dating from Smith of Warwick's time, undoubtedly erected between 1720 and 1730. Whilst there he noticed the likeness of this house to Stoneleigh, and he was informed by the owner's agent that there was another house close by dating back to the same time, a still finer house, Sutton Scarsdale, built by the last Lord Scarsdale at this special time between 1720 and 1730. Recently there had been some alterations, and a lead plate was found with the names of those connected with the building, and at the top of the list was the name Smith. He strongly suspected, from noticing the likeness between Sutton Scarsdale and Wingerworth Park and Stoneleigh, that they were all by the same man, Smith. It was a very interesting point to take up and discover whether they had here another real working mason who was one of the most successful Palladian architects of the eighteenth century. He suggested this as a point for a young architect to take up, for it was one which he would do well to incorporate in a monograph.

MR. H. HEATHCOTE STATHAM [*F.*] said that Mr. Kitson began by saying that Carr's architecture was dull; they might compliment him by saying that he had been able to read a Paper upon it which was the very reverse of dull. The particular point which interested him was the plan of the Courts, and Carr's notion of having the Courts visible to each other from one end to the other. He did not know whether it was remembered now, but it was Elmes's original notion in planning St. George's Hall at Liverpool that he should have a great hall in the centre and a Court at each end of it, and, as he expressed in a letter to his friend Rawlinson, he hoped some day to see that great vista from one end of the building to the other—to see the Judge sitting in the Court at one end, and to see the vista across the hall and the Judge sitting in the other court at the other end; and when they proposed to build a large organ to fill up one end of the hall he was very angry indeed, just as angry as Wren was about the organ at St. Paul's; he said it would quite spoil his vista. Another point he wished to remark upon was as to the external staircase and the *piano nobile* which Carr, from practical reasons, gave up in his later days. He himself felt very strongly that that external staircase was one of the finest points in the eighteenth century mansions, and it always seemed to him rather contemptible that the present generation apparently had got so frightened of going up outside a flight of steps in the rain. He had the privilege every year of stopping in a great eighteenth-century house in a part of Ireland where it invariably rained, where there was a great flight of steps to the door. He had gone up those steps many times with a feeling of satisfaction that the steps were there and looked very well, and that the rain did not matter a bit. He should be very glad to see some architect and some building-owner building a big mansion who would revert to that exceedingly fine scheme of placing the main floor at a considerable height from the ground, and having a fine flight of steps. He thought it was quite worth the exposure to the rain, and that they ought not to be so soft as to care about that. Mr. Kitson showed them a portrait of Carr by Dance. That reminded him that in the last winter exhibition at the Royal Academy Dance's portraits of Academicians were all exhibited in the water-colour room, and they were a remarkable set. He drew, he believed, profile portraits of all the Academicians of the day, and what struck him was that Dance must have had a strong personal equation, because the portraits bore such a remarkable similarity to each other. Then if the name of "Capability Brown" was mentioned in connection with that view on the wall, he should not say he had anything to do with it. The notion of Capability Brown was to cut down all the trees and to clear out everything in front of the house, and to have an open view of the house; and he would not have left trees like those shown in the picture. He had very great pleasure in supporting the vote of thanks for what he thought was a most interesting and charming paper.

MR. E. GUY DAWBER [*F.*], in supporting the vote of thanks, said he was interested in what Mr. Tipping said about the architects in different towns and places in the country. If their younger members would take up this research we should gain much valuable information. It had always seemed to him that a great many towns in England bore the impress of the hand of one man. They had seen that especially in the work of Carr of York. Again, at Stamford they would find that all that delightful eighteenth-century work was probably due to the influence of one man. It would be found later on in the work of Wood of Bath, in Nash, in the Adams, and in one who was probably unknown—in Henry Bell of Lynn. Henry Bell, like Carr of York, was twice mayor of his town. He was descended from a Baron of the Exchequer in Queen Elizabeth's reign in 1572. His ancestors settled at Beaupré in Norfolk, and he afterwards practised in Lynn as an architect. Henry Bell was born in 1653, and in 1683 he built what they would all admit was one of the most beautiful buildings in the whole of the country—the Custom House at Lynn. That building for a man of thirty, for he was only thirty when he completed it, marked him at once as a master in architecture. He also built a series of remarkably beautiful houses in Lynn, many of which have been mutilated, but in the interiors still retaining much delightful work, quite as fine as anything that Wren did. He was a contemporary of Wren, and died within five years of him. He also designed the altar-pieces for St. Margaret's Church and St. Nicholas' Church; and to show how, even in those days, in the beginning of the eighteenth century, he was considered as an architect, there is a note in the town records that he was paid a sum of £10 for designing the altar-piece of St. Margaret's Church, which sum he expended in having this altar-piece gilt at his own cost; that showed that he did receive a fee, and was considered as an architect and designer, and not a constructor only. He also built a most unique church in North Runcton, outside Lynn, which stands out as quite one of the most interesting buildings of the latter part of the seventeenth or the early part of the eighteenth century in that part of Norfolk. That was only one man they happened to have records about, and all his work could be easily traced; but he was convinced that all over the country, if they were to study and to look into it—and it was quite worth going into carefully—they would find in all these towns there had been one architect who had put the impress of his work upon the surrounding district.

MR. A. T. BOLTON [*F.*] said he should like to ask

Mr. Kitson a question. In the biography of John Dobson of Newcastle (1787–1865), written by his daughter, he was mentioned on several occasions as constructing "draught traps," as he called them —that is to say, supplying doors for lobbies and houses built by Payne, the architect of most repute of his time in the North of England. Had Mr. Kitson, in visiting these old houses by Carr, ever noticed anything that might be attributed to John Dobson of Newcastle? There was one other point he should like to refer to as showing very clearly that this mason-architect was very limited in his work. They had, of course, all heard of John Carr, and Mr. Kitson had shown them in a most interesting way what a vast amount of work he did, and he had also shown the extraordinary similarity of it. They must have noticed, however, that when the mason came under the influence of a trained architect he was simply carried off his feet; thus as soon as Carr came in contact with highly trained architects like the brothers Adam he fell at once under their spell and imitated their work. No doubt he got the fine ceilings shown on the screen done by employing the same plasterers as the Adams employed, because they seem to have had a staff. Originally started with some Italians whom they brought over, English plasterers were soon apparently trained to do work in the same style, and doubtless Carr employed some of the Adams' plasterers.

MR. KITSON, in responding, said he considered it a very great privilege to come to the metropolis of British architects to deliver this paper, which had been the product of many happy visits to different places. In reply to Mr. Gotch's question, Constable Burton was an entirely new house, built by Carr, in the North Riding. The story was told that Carr was called in by the present owner's ancestor—a young man who was about to make the grand tour—to do some alterations to the kitchen range, and when the owner returned he found the beautiful Elizabethan house, in which Queen Elizabeth herself had slept, had been completely cleared away, and Carr of York had built this entirely new mansion in its place. He (the speaker) was told this story, and his remark was that modern architects had no such luck. The other place, Burton Constable, in the East Riding, was an Elizabethan mullioned house, and, curiously enough, there existed among its records complete plans by John Carr of York for the "Palladianisation," if he might use the word, of the house, which luckily never was carried out. Mr. Tipping's writings in *Country Life* had done a great deal to awaken interest in these eighteenth-century houses; but it was lamentable to find how little interest the owners seemed to take in them. He was afraid he could not answer the point about the "draught traps," but he did not agree with the speaker who said that Carr was so limited that when he came in contact with the brothers Adam he simply became an inferior Adam, instead of giving them a provincial variety of their work, which would have had a very great interest. He was afraid, however, the truth was that Carr was not really particularly interested in his work as an art. The interest with which he looked upon it, as had been very frequently the case since, to the detriment of architecture, was merely as a means of making money and of rising out of his own class. He left a sum of no less than £160,000—considerably more than any architect up to that time, and very few since, had left. The thing that really interested him, he thought, was to become a country gentleman; that, of course, absolutely killed originality in any art, and this no doubt largely accounted for the fact that his work was so lifeless and so uninspired.

TOWN PLANNING.

PAPERS COLLECTED BY THE R.I.B.A. TOWN PLANNING COMMITTEE.

X.* By Professor Beresford Pite [*F.*].

ANCIENT AND MODERN CAPITALS.

The creation of a city has a New-World sound about it. The Englishman first, perhaps, thinks of America, where everything civilised has had to be created in the space of a recent epoch, and where there must be a most extensive assortment of experimental town-planning schemes available for European statesmen to consider, digest, and appropriate. America has the only modern capital of any account hitherto built on plan, and our great daughter nation, without the glamour of historical association or of style or site, has built with a foresight and design worthy of the great name of Washington. To-day also the opportunity has come to Australia. Wealth, dignity, and a fame second to none among the daughters of her mother have grown to be hers in the swiftly passing century of her development. From among the capitals of her provinces, great as they are, she now moves forth to seek a federal metropolis with intention and power to accomplish, we hope and trust, the greatest stride the modern world has witnessed of town planning on the grand scale. It is Australia's to embody in a complete and new continent the wisdom of her government with, we seriously but nervously trust, an architecture competent and noble, characteristic and graceful, the fruit of the ages, and as vivid with artistic life as the Commonwealth is with intelligence and power. This is a day indeed for such a subject as ours.

The modern conception, infused with the spirit of ordered arrangement, planned with spacious dignity and architectural resource, has to create its own interest and maintain national dignity without the serener charms—why call them adventitious?—such as are yielded by the Golden Horn, the yellow Tiber, or our nut-brown Thames to their respective metropolitan cities. The equally precious traditionary blessings of Justinian's building fever, Michelangelo's tremendous scale, or Wren's capacious genius, attach to the glory of these ancient capitals; but the provision of such equivalent virtue may yet be buried in our race waiting to be evolved by circumstances of education, environment, and opportunity. To this end we speak of it to-day. The castle must be designed, imagined in the air, before it can be drawn or erected upon the earth. The complete idea of a modern city is not, like an historic capital, the product of the mysteries of unrevealed history, but grows by the application of geometry to the courses of traffic, the areas of business or residence and of recreative perambulation, not forgetting the monumental value of spaciousness rather than of compression. One generation, or at most two, is required to realise for this what the laborious tides of time and accident have effected for them. The results are, of course, wholly different and not comparable. The ancient capital has been perforce the shuttlecock and plaything of time and chance, and therefore as well the creation as the creature of natural forces, while the modern city is the deliberate and concrete expression of the work and hope of either an association or an architect.

The full extent of the subject of town planning has certainly as yet barely dawned upon the minds either of legislators or architects. Garden and ideal cities, new suburbs, parks and open spaces, are each extensive subjects and fall within a similar group of ideas. Total effect, architectural grouping, regularity of plan and "lay out," completeness and balance govern the ideal and create the plan to be evolved by the ordered building of the nucleus that shall grow into a great city without distortion or waste of power. This subject, though large, is capable of discussion, and helpful principles can be elucidated to guide and stimulate the formation of an ideal town-development scheme.

IMPROVEMENT OF EXISTING TOWNS.

The improvement of existing towns is, on the other hand, not so easy of useful theorising. A primary factor will exist in each town which may bear little or no illustration by or application of the principles laid down for an ideal town plan. Towns are more irregular and various in their characteristics and possibilities than even men or women, and an abstract doctrine which might avail for street improvement, say, in a university city like Oxford, would be hopelessly inapplicable at Birmingham. London, Edinburgh, Dublin, or Cardiff would each obviously demand different management on the basis alone of natural configuration, to say nothing of the almost equally urgent considerations of national and local historical monuments and character. The great towns which are almost purely commercial or manufacturing in purpose will vary further, while the class represented by Cheltenham, Harrogate, or Tunbridge Wells and Brighton is governed by quite other hopes and purposes. Local improvements will illustrate how completely circumstances alter cases, and the attempt will be futile to lay down principles that would be adaptable for the guidance of unintelligent boards or officials. A cultivated acquaintance with the beauties of famous streets, public places, and groups of buildings will provide a useful standard of ideas, and may lead to that quickened perception of advantage of position and directness of access which is the asset of a good military general. Rigidity of idea or the application of the principles, for instance, that under-

* A lecture delivered at Hampstead on 14th July 1909 in connection with the Town Planning and Housing Exhibition.

lie the geometric setting-out of a model city plan may provide an engine for destroying the local interests and character of a town. Let old-bottle municipalities beware of the new wine of modern doctrine, and cultivate an earnest local enthusiasm, it may be even for a precinct, a close, or a buttery lane, rather than conclude that because electric tramways are the fashion in London suburbs they will prove the importers of fresh vigour into a delightfully crooked old-world city. The wide differences that affect any consideration of the improvement of existing towns, inland or centrally planned, riverside or riparial in system (as London), or seashore with a wide unlimited front extending fan-like from the point of landward approach, prevent any attempt to deal with town-improvement schemes now. It must suffice to say with what interest the architectural profession have viewed the preparation and promotion of Mr. John Burns's Town-planning Bill, and how they are convinced that the ultimate success of its proposals for the general preparation of town development schemes depends upon a wise and educated acquaintance with the great subject of town architecture as a whole. This conviction becomes an anxious prepossession when the possibilities of misconception and failure in the design of schemes which are to acquire a legislative fixedness are contemplated. The need for a proper course of training for the work of designing and preparing town-planning schemes therefore becomes the most anxious question of the day to architects, and one to which it is not too soon to give immediate attention.

THE NEW TOWNS OF GREATER BRITAIN.

Happy is the nation that points to her completed cities, perfect in their orderliness and having the special and rare quality of fulfilled design, where foresight has conquered accident and civilisation is conveniently expressed in geometry of plan and by rapidity of transit. The joys of such cities are like those of a Tantalus to Englishmen; our architects describe this blessedness and incite enthusiastic statesmen to recreate such Elysian fields at home, here in poor unkempt, untidily free Britain; for if in Paris or Washington, why not in Piccadilly, merry Islington, Edmonton, or Ware?

To Greater Britain, however, the subject is a present and urgent one. The world renews its youth and replants itself in sheds of corrugated iron, roughly grouped on pegged-out claims, which ere long shuffle out of their caterpillar and chrysalis coils and solidify with amazing rapidity into vigorous and powerful municipalities and capitals, which should also be dignified and beautiful.

To-day, while we at home are gardening the suburbs of our old incorrigible cities, the Empire is town-building in earnest, perforce from the impulse of development and heartily moved by the fresh vigour and renewed naturalness of those humane instincts of building and gregariousness which are wider than either the building trade or architectural profession. This town-planning instinct—for it is nothing less in man than in ant, bee, or beaver—has up to the present received no recognition from its proper foster-fathers, the authorities of building education and practice. Empire building is laboriously and disastrously repeating huge blunders and petrifying stupidities and ignorances which are a reproach to any people. I speak literally, not figuratively, of the incessant daily processes of foundation-digging, walling and roofing, without the aid of any ordered system of mental exercise, without the specialised instruction afforded by study and experience, in every fresh extension or renewal of town-life.

NEED OF EDUCATION IN TOWN-PLANNING.

For much and all of this a sound and simple architectural education would be something more than a palliative; this evil is wrought more by want of thought than want of heart in willingness to do the best; and the best is the wisest both economically and delightfully.

You may note how incessantly the so-called orders of Classic architecture are reproduced as an alphabet of design more or less correctly and studiously in the various classes of modern buildings in all climes. These forms have been laboriously acquired, drawn, and reproduced. Were half the time and space so devoted by instructors and handbooks afforded to a broader view of what makes for the architectural dignity and beauty of buildings, streets and cities, the modern world would have more clearly revealed in its current monuments the wisdom of its makers.

There is indeed room in all our centres of architectural life and education for a constant attention to the subject of the proper design of towns. All of us have to do with town life, and are actually in these constitutionally democratic days the paymasters and collective dictators of our own municipal officers, who build, regulate, and plan our streets, or should do so; and apart from any infusion of architectural thought into a general scheme of educational reform, which is greatly to be desired, for works of art and nature should not be divorced or unequally yoked in the education of a just mental balance. The specialised training in architecture of its own practitioners ignores this subject gloriously.

The recognition of the problems of our own Colonial life, which are more extensive, interesting, and beneficial than most, if not all, of the stock historical and ornamental exercises of the architectural student, urgently claims attention at headquarters. The stock properties of professional education are exercises in purely local architectural limitations both in æsthetic history and in constructional practice. An English architect practising in India questioned me the other day as to suitable precedents for the case of a clergyman who had

instructed him to design a church in the Norman style for an Indian station. It is surely bad enough to put the hands of the clock back eight centuries at home in ecclesiastical building, but to employ local English time, and that eight centuries late, where sunshine, seasons, and simooms all differ is a marvel of the refined perception of the intelligent mission of architectural expression. The practical art of building construction is, moreover, not as yet taught as an exact science, the principles of which are capable of universal application, as indeed they are on every spot on this habitable globe where the law of gravitation works. All materials and climates yield obedience to principles of design which are not more abstruse or difficult of perception than those which govern British standard bricks or Baltic scantlings. The chemist, naturalist, and engineer go forth into the wider world of Britain beyond the seas equipped for varying conditions and relationships to nature. Why should not the builder and architect, upon whom devolves the conception and construction of multitudinous buildings, be equally furnished by education with a ready knowledge of how to employ his present opportunity and its characteristic materials and purposes?

ENLARGEMENT OF ARCHITECTURAL EDUCATION.

But such an education, if confined to architectural candidates—that is, to intending professional men—may entirely miss the class of energetic prospectors, probably the most miscellaneous of all classifications. Though it certainly is reasonable and necessary, it would be an amazement out of Wonderland if the necessity of having a proper architectural member of the staff were recognised in the public prospectus of any of those companies which by the development of gold and diamond mines, or coal or otherwise, incessantly create embryo townships which ere long become provincial centres and perhaps capitals. In a general education syllabus should not some practical application of geographical particulars lead to the formation of ideals as to situation, lay-out, and growth in the great cities of the world? Lantern-slide excursions would very rapidly involve actual acquaintance with satisfactory examples for criticism and instruction. How to build a town—what comes first—the inevitableness of widenings—the certain increment of values near the meeting place of routes—rapid temporary building as of a camp, with illustrations of how the exigencies of the Roman military castra have until to-day fixed up the facts in dozens of living English townships:—all this and much more of vital work could be most profitably sown into the youthful English mind for certain fruitfulness both at home and overseas in the short course of a rising generation. Happily there is more educational elasticity both of outlook and method in all classes now, and one can foresee a new and happy mingling of the Classic and modern sides of the present much-debated school curricula in a study of Greek and Roman civic law and practice applied to the most progressive ideas and facts of the day.

But our point of view as specially educated architects is terribly limited. The present-day architect is not in any true sense a survival of mediævalism or follower of the cathedral builders; he is not even an intelligent archæological product, for you will look in vain among mediæval builders for any trace of the modern delusive vision of the beauty of all that is nearly two hundred years old, or of the necessary evil of modern matter. The progressive ancient architect not only spurned to follow the work of his immediate predecessor—the present day does that too, and with marvellous and unfathomable self-complacency—but he refused any undue respect to precedent, and incessantly moved onward gathering momentum each generation from the eleventh century until the sixteenth; the progress of civilisation, craftsmanship, and science evidenced in the building arts of England between the times of William the Conqueror and the Tudors—that is, from St. John's Chapel in the Tower of London to Henry VII.'s Chapel at Westminster—is probably unparalleled in Europe. The modern architect moans at the progressive age in which he is cast, and, lacking the spirit, imitates the letters and spelling of the builders of Chaucer's day. So the Empire has to grow without his sympathy and aid, lacking a true architectural flavour in the pottage of its common life.

A NEW ENTHUSIASM.

In the new interest of town planning one may foresee and hope for a new enthusiasm for the progressive humane science of building and buildings that will liberate us from the narrowness of our very limited antiquarianism. The history of the world lies most evidently in that of its towns, not merely that they are the physical embodiment of varying epochs of character and power, but are the expression of intellectual forces and character. The architect of a town has a special and vital interest in the civic life of ancient Hellas, and finds in the municipal legislation of Rome, as well as in the pathetic crookedness of the Via Sacra amidst all the grandeurs of the Forums, more secrets of town planning than he had yet suspected. Palmyra, queen of the desert, the still evident greatness of the cities of the southern shore of the Mediterranean, all have secrets to give up of the greatness and science of the world's greatest building empire. Spalato and the later Byzantine greatness of Justinian's school of building, all and each varying and wonderful, are fields yet undetailed for the student of this subject. Mere archæology becomes dryasdust antiquarianism, but vitally intelligent archæology is a practical training in architecture unrivalled in its mental discipline and opening power. The road building, aqueduct bringing, the permanence of the Cloaca Maxima, are all subjects waiting for inclusion in this branch of

architectural study, where the ancient and modern world will unite in the bond of sympathetic pursuit of sanitation and order. In a later period of petty warring States, but of ecclesiastical unity, the Mediæval vision begins to fill the eye, and has strangely attracted modern Fancy. Sentiment, properly ordered, is one of the strongest elements in architectural beauty, but let loose upon romantic Mediævalism it has usurped more than its proportion or measure. Modern artists, jaded in their conflict with engineering progress and philistinism, experience with refreshing excitement the historic thrill of a decaying city, and marvel at the playfulness of Time with the garments of a sleeping city; their happy souls number the scars of time, trace with patriotic but artistic fervour the storm marks, assaults, demolitions, and recoveries of the almost vanished ancient life. The grass-grown street, the grey oak, the sunken lathings, the faded whitewash, the decaying brickwork and weather-worn masonry are the tonics that art and affection minister to recovery from the fog-laden air of this uncared-for brutally modern age. And they make what use they can of these invigorations, and the semblances of irregularity are imparted not only to plans but to buildings and groups; and this art, creating its own atmosphere, breathes in petty quaintness the romantic air of the past. This humour, this antiquarian hypocrisy, superstition, and credulity may be lawfully exercised in private at the expense of those it amuses, but the practical earnestness of town planning forbids such sentimental pantomime. What would a poor motor-'bus do if the texture of Mediæval romance were imparted to the pavement or gradients of the high street, or its pointed acuteness to the angles of the market square? What civil or sanitary authority would tolerate genuine active exspumatory gargoyles in a summer storm? And what use are the symbols of Mediæval fortification, the fruit of blood-bought experiments redolent of feudal oppression and municipal dependence, as means of an artistic expression of modern life? All this can be left to become the whim-food of the private client, attesting, like the Gibeonitish mouldy bread, clouted garments, and rent wine-skins, the distance of the journey from the facts of to-day.

In town planning the ancient and the modern divide sharply. We are here in the living present and cannot stay to quarrel longer with the private practice of architects, but preach again the new mission to educate in the essentials of great and noble architecture the race that is building cities around the world, to-day and every day, without adequate guidance from those who should be entitled to lead.

REVIEWS.

LIVES OF BRITISH ARCHITECTS.

The Lives of the British Architects from William of Wykeham to Sir William Chambers. By E. Beresford Chancellor, M.A., F.R.Hist.Soc. 8o. Lond. 1909. *Price 7s. 6d. net. [Duckworth & Co.]*

Mr. E. Beresford Chancellor tells us in the preface to this work that his object has been to give a more or less concise account of the lives of the British architects from the days of William of Wykeham to those of Sir William Chambers, and the result of his labours is embodied in a well-illustrated, well-printed, and generally attractive volume published by Messrs. Duckworth. The opening chapter contains an interesting sketch of the remarkable career of William of Wykeham, the architect of a considerable portion of Winchester Cathedral, whose name is otherwise familiar as the founder of New College, Oxford, and of Winchester School as we know it now.

It is rather startling to realise that, after Wykeham's death in 1404, "there is no record of any great architect in this country to the close of the reign of Mary," but, as Mr. Chancellor points out, a large portion of the intervening period was one of storm and stress in England. Undoubtedly many notable buildings were erected, but, as a rule, they were largely the work of foreign architects—for instance, Hampton Court, the main fabric of which was constructed by English masons and bricklayers, whilst the more decorative portions were wrought by foreigners. Thus, although the splendid traditions bequeathed to the nation by Wykeham were not lost, inasmuch as architecture still flourished in this country, yet the buildings of the period mentioned were carried out "by those whose combined efforts were alone able to effect what the genius of a single man at an earlier, and also at a later, age produced." But, whatever the cause, foreign work and foreign workers had a greater attraction for the Lancastrian and, until the time of Elizabeth, for the Tudor sovereigns than native labour, and the palaces and other structures of the time of Henry VIII. were built under the direction of alien architects, such as Jerome de Trevise, John of Padua, and Holbein.

The result is that "when we seek for the names of British architects who may, however feebly, form a connecting link with the greater names in what becomes later a splendid chain, we find, and have to be content with, such facts as that one Nicholas Walton (the designer of the stupendous timber roofs of Westminster and Eltham) was a master carpenter and engineer in the reign of Richard II., and that John Kendale was a supervisor of the royal buildings in that of Edward IV., for between these periods not even such names are forthcoming." So it comes about, notwithstanding the fact that the reign of Henry VIII. was a

fruitful period for English art, that the first name (after Wykeham's) in our architectural annals to which we can with any certainty apply the designation of architect is that of John Thorpe in the reign of Elizabeth. Kirby Hall, commenced in 1570, is probably one of Thorpe's earliest efforts; later came Rushton, built for Sir Thomas Tresham; but authorities differ as to the exact share of Thorpe's work in other well-known buildings with which his name is associated, such as those of Rothwell and Lyveden, with regard to which and other greatly admired Elizabethan or Jacobean mansions, many architects of to-day will agree with Mr. Chancellor that theirs is a beauty "rather consecrated by age than one inherent in them when they were first fashioned; and it is not improbable that, satisfactory as they may have appeared to contemporaries, they would have proved tasteless to anyone who might have possessed a more accurate and comprehensive knowledge of architectural rules."

Among other architects of this period are Gerard Chrismas, who is said to have collaborated with the Flemish architect, Bernard Jansen, in the erection of Northumberland House, Charing Cross; Ralph Symons, notable for much good work at several of the colleges at Cambridge; Gilbert Wigge, associated with Symons in several important buildings; and Dr. Caius, who refounded Gonville and Caius College, and is said to have supplied the designs for its three gateways of Humility, Virtue, and Honour.

Whilst Symons was at work at Cambridge many of the collegiate buildings of the sister University were being altered or enlarged under the direction of Thomas Holt, who, born in Yorkshire and originally a carpenter by trade, is supposed to have taken up his residence at Oxford in 1600. Here he is said to have carried out various works of more or less importance, including the Fellows' Quadrangles at Wadham and Merton, but some authorities (including Mr. Blomfield) now concur in regarding Holt merely as a master carpenter who was accustomed to contract for the design and execution of woodwork.

Little is known of the life of Robert Adams, who was one of Queen Elizabeth's surveyors, nor of Robert Smithson, said to have been associated with Thorpe in the creation of Wollaton (commenced in 1580) for Sir Francis Willoughby. Robert Smithson's son (Huntingdon Smithson), who was also an architect, was responsible for the design of Bolsover Castle (1613).

Broadly speaking the architects of the Elizabethan and Jacobean periods were, for the most part, little better than master masons, or, as Mr. Chancellor describes them, "builder designers," who executed work that was based rather upon traditional designs, applied with the assistance of the pattern-book, than upon their own unaided imagination; thus, notwithstanding the existence of many architects (as they were then termed) and of innumerable magnificent buildings, the first really great British architect was Inigo Jones.

A very ably written and comprehensive sketch of the life of this great master of architecture is included in chapter iii. of the volume now under discussion, whilst the following chapter deals with the architectural achievements of his immediate successors—viz. Webb, Hooke, and Jerman. As with the advent of Inigo Jones a recognised standard of design, founded upon the true principles of architectural scholarship, was for the first time firmly established in this country, the master's influence, naturally enough, is perceptible in the works of those who followed him. For example, John Webb, a nephew and pupil of Inigo Jones, had a hand in many of his master's later designs, and, on the death of his master in 1651 or 1652, Webb completed Ashburnham House, Westminster, and carried out some minor works at Drayton and Vyne, near Basingstoke.

Webb's individuality is, however, best expressed in Thorpe Hall, Peterborough (commenced in 1656), which Mr. Blomfield describes as "a singularly dignified building and a good instance of that very interesting phase of architecture which extended from about 1640 to 1670."

Robert Hooke, born in 1635, was, like Wren, a distinguished mathematician and natural philosopher before he became an architect. After a successful scholastic career at Westminster and Oxford, which culminated in his obtaining a Professorship of Mechanics, we find him, at the age of forty, engaged in the practice of architecture. Mr. Chancellor does not tell us when or where in the course of Hooke's busy life he was enabled to acquire the necessary technical knowledge of the profession which, late in life, he thus adopted, but merely states that Bethlem Hospital was commenced in 1675 after Hooke's designs, and that the same architect was soon after busy with the erection of Montagu House, Bloomsbury, and Aske's Hospital, Hoxton.

Both the date and place of birth of Edward Jerman are wrapped in obscurity, but it is certain that, as surveyor to Gresham College, he was appointed in 1666, in company with Dr. Hooke and the City Surveyor (Mills), to report on the havoc made by the Great Fire, and to prepare plans for rebuilding certain portions of the City which had suffered from its effects. This scheme involved the erection of a new Royal Exchange, for which Jerman was commissioned to supply the design, and the completed building was publicly opened on the 28th September 1669, about a year after the death of its architect. Jerman's other architectural works included the second Hall of the Fishmongers' Company in Thames Street, Drapers' Hall in Throgmorton Street, that of the Haberdashers' Company in Gresham Street, and the Hall and Chapel of the Mercers' Company.

"For many people Sir Christopher Wren stands

for the beginning and end of architecture in this country. Wykeham's fame in this direction is so illusive, and is besides so merged in his even greater qualities as a statesman and ecclesiastic, that his connection with the building of Windsor and Winchester is but dimly remembered; Inigo Jones occupies a position second to none in the annals of the art, but his actual work is not largely known except to those who have given themselves to the study of architecture; . . . . while, for the rest, Chambers (to take an example) is known by name to many who would be hard put to it to point out examples of his work, and the Adam brothers are identified, in the general mind, rather with the graceful decorations which they applied indifferently to houses and furniture than with those schemes of a larger kind which stamped them as once prominent architects."

These introductory remarks are a fitting prelude to a brilliantly written sketch of the life of Sir Christopher Wren, with regard to whom, as Mr. Chancellor well expresses it, "the delicate beauty of the steeples of his churches which meet us at all points in London would have been sufficient to keep his name permanently before the world, irrespective of the fact that his magnificent cathedral dominates the metropolis—and, even as its ample dome towers above the other buildings of London, so his fame overtops that of all the men who worked in the same direction in this country before and after his day."

Wren's contemporaries and immediate successors —viz. Bell of Lynn, 1653–1717; Talman, who died in 1715; Pratt, 1620–1684; Vanbrugh, 1666–1726; and Hawksmoor, 1661–1736—are dealt with in the following chapter of the book. Of these the works of Vanbrugh and Hawksmoor are well known to the readers of this JOURNAL. With regard to the others, Bell, in common with his great predecessor, appears to have received no specific architectural training, his earlier years being devoted to mastering the art of engraving. However, at the age of thirty he designed, and designed well, the Exchange or Custom House for his native town, in addition to various other almost equally meritorious buildings.

Talman's best work is the stately mansion of Chatsworth, erected in the course of nineteen years for the first Duke of Devonshire. He also acted as "Comptroller" of the works designed by Wren at Hampton Court, in which capacity, anxious to further his own interests with William III., he made several attempts to belittle the architectural reputation of his immeasurably superior colleague.

A brief but extremely interesting account is given of the life of Pratt, who, on leaving Oxford, was for a time a student of the Inner Temple, but subsequently, after a visit to Rome, he developed a taste for architecture, in which he eventually achieved so high a reputation that he was commissioned, in company with Wren, Evelyn, and May, to survey St. Paul's Cathedral, with a view to its restoration.

After the Great Fire of London Pratt found employment in rebuilding a considerable portion of the City, and was knighted for his services; but his best work was Clarendon House, designed in 1664 for the then all-powerful Chancellor. Pepys describes this building, which was demolished in 1683, as "a beautiful house, and most strongly built in every respect;" and even the more critical Evelyn admitted that it was "a goodly pile to see," and "placed most gracefully," although it had "many defects as to ye architecture."

In chapter vii. the architectural achievements of Archer, James of Greenwich, Campbell, Burlington, Pembroke, and Kent are discussed at some length. Archer, in whose works Mr. Chancellor discerns traces of the influence of his master Vanbrugh, at first studied architecture, as gentlemen were then beginning to do, merely as a portion of his general education, but in 1705 he appears to have become equipped for practice and built Heythrop Hall, Oxfordshire. Later he planned St. Philip's Church, Birmingham, a really fine example of his somewhat fitful powers of design.

Archer's well-known Church of St. John, Westminster, built between 1714 and 1728, has met with severe criticism, but if the body of this church had been raised and the structure surmounted by a large central tower and spire in accordance with the original intentions of the architect, praise rather than blame would probably have been associated with the name of its designer.

There are no records of the early education of John James, better known as "James of Greenwich," who in 1705 was chosen to succeed Hawksmoor as Clerk of the Works at Greenwich. In 1710 he designed the mansion at Twickenham afterwards known as Orleans House, but the Church of St. George, Hanover Square, is probably the best example of his work. Mr. Chancellor not inaptly describes James as "a painstaking and carefully trained designer, who, despite all his knowledge, lacked that touch of inspiration which goes to the making of a pre-eminent architect." He is probably equally correct in his judicial remarks on Colin Campbell, which are to the effect that the name of this architect would have been almost unknown to a later generation than his own had he neither worked under the *ægis* of the influential Lord Burlington (the *Mæcenas* of his day) nor published the sumptuous *Vitruvius Britannicus*.

Campbell's chief patron, the Earl of Burlington, was an accomplished man, who was keenly interested in the art of architecture, his theoretical knowledge of which was much in advance of his practical ability. The extent of Lord Burlington's share in the architectural productions with which his name is associated is discussed at some length.

Lord Pembroke, of whom Walpole says that

"no man had a purer taste in building," was another amateur designer of the day whose influence and patronage did much for the development of the art of architecture.

Kent is described as "an all-round and accomplished artisan to whom nothing seemed to come amiss." But the diverse nature of his accomplishments was detrimental to pre-eminence in any one direction. The Horse Guards, erected after Kent's death under the superintendence of Vardy, and Holkham Hall, were his most successful works.

One is inclined to wonder why a sketch of the career of Batty Langley, whose name was destined to become, at a later date, a term of architectural opprobrium, should appear in the volume; but, whilst admitting Batty Langley's limitations on the practical side of his art, Mr. Chancellor thinks that as this so-called architect established a school and wrote much on the subject of architecture some account of his career in a work dealing with the lives of British architects is justifiable.

The works of James Gibbs are invariably distinguished by a careful adherence to those recognised formulas to which the greatest men have owed so much, and thus on occasions "he allowed tradition to curb what might otherwise have been a genius of the very first order."

Mr. Chancellor's eulogistic remarks on the Woods (father and son) of Bath, will be endorsed by all who know and can appreciate the splendid work carried out by these architects in their native city, which, mainly owing to their genius, became one of the most beautiful in England.

The fame of another provincial architect, Carr of York, was also considerably more than merely local, and his conspicuous architectural ability brought him a very considerable amount of work in the North of England.

Thomas Ripley, although pilloried in the "Dunciad," was not the hopelessly bad architect that Pope would have had his readers believe. Indeed, one of his buildings (Wolterton Hall), erected during the years 1724–1730, is praised by Walpole as being "one of the best houses of the size in England." For a detailed account of the structures erected during the first half of the eighteenth century at the ancient seats of learning by four famous "amateur" architects—viz. Dean Aldrich and Dr. Clarke of Oxford, and Sir James Burrough and James Essex of Cambridge—I must refer my readers to the book itself. In contrasting the work thus carried out at Oxford and Cambridge respectively, Mr. Chancellor expresses the following opinion with regard to the last-named architect (Essex):—"Coming, too, after Burrough, who had sinned in the same way, even if he had not done so to the same extent, he did infinite harm to the University; and it is a matter of congratulation for Oxford that what rebuilding was done there at this period, if not of the best kind, was at least carried out by men like Aldrich and Clarke with a reverence due to its existing buildings and their manifold associations."

Much of the work of John Vardy, a pupil of William Kent, was done in association with his master; but after the death of the latter, in 1748, Vardy was selected to carry out Kent's design for the Horse Guards. Spencer House, a well-planned eighteenth-century mansion, is probably the best example of Vardy's individuality.

Isaac Ware, editor, translator, and publisher of architectural designs, was another contemporary architect of considerable ability, and the designer of Chesterfield House, Mayfair; but in George Dance (the elder) Mr. Chancellor finds a man of a very different calibre. "He was not in any sense a great designer, nor did he possess any of that originality which has sometimes caused an architect to be regarded as one who must be reckoned with, even if he breaks all rules and casts tradition to the winds."

Until I read this paragraph, which occurs in one of the later chapters of the book, I had been in such general agreement with Mr. Chancellor as to have laboured under the disadvantage (from a reviewer's point of view) of finding little or nothing to criticise, but I am bound to say I am unable to endorse altogether his opinion of the works of the elder Dance, which were, I think, on the whole fully equal to those of his contemporary architects who were not absolutely in the front rank of their profession. For example, the Church of St. Leonard, Shoreditch, and the Mansion House, London, despite some carelessly designed details, are certainly buildings of more than average architectural merit.

Dance (the younger), 1741–1825, succeeded his father as City Surveyor, and in that official position carried out his most successful building, Newgate Prison, the recent demolition of which was an irreparable loss to the architecture of the metropolis.

Henry Flitcroft (1697–1769) was one of the last of the earlier eighteenth-century architects who were all more or less influenced by the works of Inigo Jones. His earliest important building was the Church of St. Giles-in-the-Fields, London (opened in 1734).

Matthew Brettingham (1699–1769), a pupil of Kent, seems to have had a considerable share in the preparation of the designs for Holkham Hall, the completion of which (owing to the death of his master) was entrusted to him. Among the buildings for which Brettingham was solely responsible were Langley Park, Norfolk; Norfolk House, St. James's Square; and Cumberland House, Pall Mall.

Robert Taylor (1714–1788) was apprenticed to a stonemason, but afterwards journeyed to Rome to study the many famous examples of the plastic art to be found in that city. On his return to England he worked for some years as a sculptor before, in 1753, entering the architectural pro-

fession. At his death, after an exceedingly prosperous career, he bequeathed the bulk of his fortune (£180,000) to the University of Oxford.

Two of the most important of the multitudinous works of James Paine (1716–1789) were Kedleston Hall (commenced by Brettingham and completed by Robert Adam), and Worksop Manor House, designed on a magnificent scale for the Duke of Norfolk.

In contradistinction to Taylor and Paine, Robert Morris was neither a prolific nor a very successful architect, and he expended a considerable portion of his enforced leisure in the compilation of architectural books.

Robert Adam was "the most famous of those brothers whose inauguration of a new style of design" gave, for a time, the death blow to that heavier Palladian form which had for many years dominated the country.

Outlines of the career of William Chambers, who "upheld the true spirit of the Renaissance against the prevailing fashion for a dilettante rendering of Greek models on the one hand, and Gothic on the other, into a weak modernism," and of James Gandon, notable as the architect of that remarkably fine building, the Custom House, Dublin, bring Mr. Chancellor's new volume to a fitting termination. Written as it is in a most attractive and scholarly style, and in a manner which must have necessitated a vast amount of painstaking labour and preliminary research, his book will doubtless become popular among architects. It should also be in great demand with those members of the community who are once again awakening to the growing necessity of including some knowledge of architecture (and of its exponents) as an integral part of a liberal education. By such means alone can the general public be brought to appreciate, in an enlightened and intelligent manner, those true principles of architecture which are exemplified in many of the splendid monuments bequeathed to the country by old-time masters of a great art.

ALFRED W. S. CROSS [*F.*].

THE PRESIDENT'S SOIRÉE.

The drawings exhibited in the Institute rooms on the occasion of the President's soirée on the 10th represented some of the work of deceased architects and draughtsmen, in contradistinction to those shown on a previous soirée, when water-colour drawings by living architects were shown. The drawings consisted of (1) those in the possession of the Institute; (2) working drawings of buildings designed and carried out by some eminent architects of the last century; and (3) a small collection of drawings by well-known draughtsmen of the last century, lent by myself and my brother. In the first division the most important were the original water-colour drawings by Stuart, published in Stuart and Revett's *Antiquities of Athens and other Places*, some of which were of special interest as they represent buildings which exist no longer or have been much changed since. The Ionic Temple on the Ilissos, for instance, was destroyed by the Turks in 1780, and the materials used in building elsewhere. The drawing of the Erechtheum showed the west front almost complete and the north portico beyond walled up between the columns; within recent years both have been restored; and the monument of Lysicrates, in its original condition, built up in the rear wall of a convent garden, which suggests that its preservation is probably due to this circumstance. In the back library were shown albums containing the drawings of W. Eden Nesfield, 100 of which were published in 1862 in his well-known book on medieval architecture; of R. J. Johnson, specimens of Early French architecture, 1864; of J. K. Colling, the author of works on Gothic ornament; and drawings by Sir Robert Smirke and Mr. A. Roos, the latter an interesting collection presented by Mr. Sayer, among them some admirable drawings of Pompeiian decoration. There was also a large volume of original drawings by various Italian and French artists, among which are included those of the two Bibbienas, Panini, Servandoni, B. Cellini, De la Fosse, Gabriel, Puget, and many others. These albums constitute a small portion only of the collection possessed by the Institute, which ought to be better known.

In the second division were the following working drawings: of Sir Arthur Blomfield, A.R.A., lent by his sons—Church House, Westminster; St. Saviour's, Southwark; Malvern Chapel, and St. Mary Portsea; of G. E. Street, R.A., lent by his son, Mr. Arthur E. Street—perspective drawings of the Parsonage House at Kingston, Dorset, and St. Mary's, Monmouth; of G. F. Bodley, R.A., lent by Mr. C. G. Hare—St. John's Church, Cowley; St. Augustine's Church, Pendlebury; and St. Mary's, Clumber; and of J. L. Pearson, R.A., lent by his son, Mr. Frank Pearson—drawings of Truro Cathedral; St. John the Evangelist, Red Lion Square; and St. Augustine's, Kilburn.

The third division was a small collection of drawings which I offered to send down, and included the Old Gate, Rotterdam (now demolished), by Clarkson Stanfield, R.A.; two drawings of the Shaft of Bewcastle Cross, in Cumberland, by Wykeham Archer, the draughtsman of the Duke of Northumberland; an interior of a mosque at Luxor, by the late Professor Brune; the great arch at Palmyra, by Cassas, the author of the work on Palestine, etc.; Old Magdalen Hall, by J. K. Colling; the Temple of Neptune, Pæstum, by F. Pepys Cockerell; the entrance doorway of the ruined church of St. Etienne-le-Vieux at Caen, by W. W. Deane; a fountain at Subiaco, by Solomon Hart, R.A.; the doorway of the Chapel at Amboise, by W. Muller; two drawings by Joseph Nash—viz. St. Mary's,

Oxford, made in 1854 (before its restoration); and King Charles's window, St. John's College, Oxford—the original drawing of the Gilt Room in Holland House by C. J. Richardson, published in the *Architectural Remains of the Reigns of Elizabeth and James I.*; the Temple of Hermonthis in Egypt (now destroyed), by David Roberts, R.A.; and a study in the Campagna, by Sir Digby Wyatt. My brother, Mr. Walter L. Spiers, lent an interesting drawing by R. W. Billings, the author of the *Baronial Antiquities of Scotland*, representing the Houses of Parliament after the fire, and showing the walls of the Painted Chamber on the left and in the centre the remains of St. Stephen's Chapel, of which the crypt only exists now, under the existing building.

R. Phené Spiers, F.S.A. [*F.*].

CORRESPONDENCE.

The Church Organ [pp. 169, 238].

To the Editor, Journal R.I.B.A.,—

Sir,—I do not confuse either persons or things, but I cannot recognise the arbitrary distinction Mr. Statham claims to make between cathedral and parish churches touching music and worship. Monastic churches are another matter.

In a cathedral church, as now, what Mr. Statham would appropriate for his large organ is really the Rood loft, and the place of his choice (the old position, to use his words) belongs of prior right by many centuries to the Rood.

If for the sake of organ effect this usurpation were again generally allowed, where is the line to be drawn between our small cathedrals and our large parish churches?

If at Beverley Minster, why not at St. Mary, Beverley? And if at St. Mary, Beverley, why not at Hull Parish Church?

If at Lichfield Cathedral, why not at Tamworth Parish Church?

There is ancient authority for small organs on parish Rood lofts, and some good instances of modern organs of moderate dimensions on the walls at the sides; but I am not advocating the position. I mention the facts to show that Mr. Statham's distinction would vanish in practice, and the big organ in the loft on the screen of the cathedral be aped by a smaller organ on the Rood screen of any large parish church with ambition and wealth. A new loft would probably be constructed of rolled steel joists and concrete, to make good (!) the vandalism of the past.

Happily, the large organs have been removed from the central position on the Rood lofts of most of our cathedral churches, partly for the rather vulgar idea of obtaining an unbroken vista; partly, perhaps, because there was not room for the modern overgrowth of the instrument; partly in order that the congregation should not be limited practically to the scanty accommodation in the Choir: that the people in the nave might not feel themselves shut out from their fellow-worshippers on the other side of the screen.

But even where the screen is still two bays down the Nave, the Choir long, the congregation permanently small, and the greater part of the Nave reduced to an ante-chapel or a concert-hall, there is still the objection that the organ, placed on the screen, is too far from the voices of the singers below and farther east.

For even if the organ always keeps time with the voices the result is not an harmonious whole, and when the full choir is singing there are three separate music-points, with some of the congregation unhappily placed between.

With a small choir, organ troubles of another kind come in, as in a parish church choir placed in the Chancel.

Mr. Statham mentions them in his admirable book, and I was both surprised and disappointed that he did not advocate, as the way out, a return to the west end position for both organ *and choir*.

Picture St. Paul's—choir, organ, orchestra in a large western tribune; the church crowded, the Choir with the bishops and clergy of the diocese; the Dome, Transepts and Nave with laymen; the occasion the Patronal Festival, perhaps a National Thanksgiving, a Solemn Te Deum.

But this is not yet, and it introduces many very important considerations connected with the ordinary services, out of place here.

Ernest C. Shearman [*A.*].

P.S.—In some Cathedral and Monastic Churches, where there were undoubtedly two screens originally—Rood screen and Choir screen—the destruction of the former would not justify the organ being placed in the centre of the latter simply for musical effect; for viewed from the nave the organ would be the predominant feature instead of the Rood. It is fair, I think, in such cases to claim the Choir screen as the Rood screen now, by development.

E. C. S.

The late Thomas Worthington.

22 *Southampton Buildings, W.C.:* 11 *Jan.* 1910.

To the Editor, Journal R.I.B.A.,—

Sir,—In the interesting note upon the late Mr. Thos. Worthington, it is suggested that he was "the first to design a hospital in England on the pavilion principle."

The first hospital of this kind was, however, built at Blackburn, in 1858, and the architects were Messrs. Smith & Turnbull.—Yours faithfully,

A. Saxon Snell [*F.*].

9 Conduit Street, London, W., 22*nd January* 1910.

CHRONICLE.

Building Tenders and Contracts.

On the 13th December 1909 deputations from the London Master Builders' Association and the National Federation of Building Trades Employers of Great Britain and Ireland were received at 9 Conduit Street by the President, Vice-Presidents, and Hon. Secretary of the Institute.

Mr. Rice, President, and Messrs. Wm. Shepherd and Randall represented the London Master Builders' Association, and Mr. Ernest J. Brown, President, and Messrs. F. Smethurst, J. W. White, James Wright, F. Higgs, and W. Thomas represented the National Federation of Building Trades Employers of Great Britain.

The deputation stated that for some time a practice has been growing amongst architects in London and the provinces of asking builders to send in tenders for works without quantities being supplied to the builders upon which the tenders might be based. Secondly, that architects attempted to make a written acceptance of the tender an agreement binding the builder to sign a certain form of contract. Thirdly, that when quantities for the works were supplied to the builders, the latter were asked to deliver their priced schedules with the tenders.

With respect to the first point it was felt that sometimes unnecessary expense was thrown upon the builders in requiring each of them to take out the quantities necessary for the preparation of their estimates, and members of the Institute are recommended to have quantities prepared for all ordinary works above £500 in value. If the works are below £500 in value it would be advisable for architects (if quantities are not supplied) to invite tenders from not more than two builders so as to reduce the cost of preparing estimates, this economy being ultimately beneficial to the client.

Wherever it is practicable for quantities to be prepared without unduly increasing the cost of the works, it is desirable that these should be supplied, but if in the discretion of the architect these quantities are not prepared, then the invitations to builders to tender should be restricted in number.

With reference to the second point, it was urged by the deputation that often there was no time for builders to read carefully through the form of contract before sending in the tender, and, therefore, that a written acceptance of the tender should not constitute a binding agreement to sign a form of contract to which exception might properly be taken.

The Institute representatives, while expressing no opinion upon the legality or otherwise of the practice above referred to, urged upon the deputation the great desirability of only signing the form of contract issued by the Institute.

The third point was exemplified by instances of public bodies and architects demanding the submission of priced bills of quantities along with the tender, with the grave risk of these being used in an unfair or improper manner.

It is, therefore, recommended that members of the Institute should not adopt this practice, but adhere to that set out in clause 3 of the Conditions of Contract issued by the Institute, and that they should do all in their power to stop the continuance by public authorities of the practice complained of.

James S. Gibson, *Vice-President.*

THE PRIZES AND STUDENTSHIPS 1910.

The Council's Award.

The Designs and Drawings submitted for the Institute Prizes and Studentships are now on exhibition in the Gallery of the Alpine Club (entrance in Mill Street, Conduit Street, W.). The Council's Deed of Award, read at the General Meeting of the 17th January, gives particulars of the competitions and the results thereof as follows:—

The Royal Institute Silver Medals.

(i.) *The Essay Medal and Twenty-five Guineas.*

Six Essays on "The Treatment of Gardens in connection with Buildings" were received for the Silver Medal under the following mottoes:—

1. "Aero."
2. "Axial."
3. "Domus et Hortus."
4. "Peter Pan."
5. "Rez de Chaussée."
6. "Rusticus in Urbe."

The Council have awarded the Medal and Twenty-five Guineas to the author of the Essay submitted under the motto "Domus et Hortus" [*John Alexander Ogg Allan*], and a Certificate of Hon. Mention to the author of the Essay submitted under the motto "Rez de Chaussée" [*John Nixon Horsfield* [*A.*].

(ii.) *The Measured Drawings Medal and* £10 10*s.*

Twelve sets of Drawings were sent in of the various buildings indicated, and under mottoes as follow :—

1. " Ad Metam Contendo " : 6 strainers (The West Portico of St. Paul's Cathedral).
2. " Adige " : 5 strainers (Palazzo Pompeii and Palazzo della Gran Guardia Vecchia, Verona).
3. " Cyrus " : 5 strainers (St. Bride's, Fleet Street).
4. " Doric " : 6 strainers (Stables, Wentworth Park).
5. " François Mansart " : 6 strainers (Hotel Carnavalet, Paris).
6. " Manners makyth man " : 5 strainers (Winchester College).
7. " Omega " : 4 strainers (The Senate House, Cambridge).
8. " Perseverando " : 6 strainers (Church of St. John the Baptist, Paignton, Devon).
9. " Puggins " : 6 strainers (St. Paul's Cathedral).
10. " Q " : 7 strainers (Christ Church, Spitalfields).
11. " Roma " : 6 strainers (The Wellington Monument).
12. " Volute " : 4 strainers (St. Paul's, Sheffield).

The Council award the Medal and Ten Guineas to the author of the drawings submitted under the motto " Roma " [*James Whitelaw*] ; a Certificate of Hon. Mention and Five Guineas to the author of the drawings submitted under the motto " François Mansart " [*Cyril de Farey*] ; and a Certificate of Hon. Mention to the author of the drawings under the motto " Adige " [*Herbert J. Rowse*].

THE TRAVELLING STUDENTSHIPS.

(i.) *The Soane Medallion and* £100.

Seventeen designs for a Shakspeare Memorial Theatre were submitted under the following mottoes :—

1. " Autolycus " : 4 strainers.
2. " Caliban " : 7 strainers.
3. Star and Crescent on Shield (device) : 5 strainers.
4. " Forward " : 6 strainers.
5. " Horse Shoe " : 4 strainers.
6. Horse Shoe (device) : 7 strainers.
7. " Mafie " : 5 strainers.
8. " Nunquam Dormio " : 5 strainers.
9. " Pro Tempore " : 2 strainers.
10. Red Seal (device) : 7 strainers.
11. " Sunshine and Air " : 5 strainers.
12. " The Budget " : 6 strainers.
13. " Touchsoane " : 5 strainers.
14. Yellow Disk (device) : 6 strainers.
15. " Puck " : 5 strainers.
16. " L'Espoir " : 4 strainers.
17. " Mirth " : 5 strainers.

The Council have awarded the Medallion and (subject to the specified conditions) the sum of One Hundred Pounds to the author of the design submitted under the motto " Mirth " [*Alick George Horsnell*], and a Certificate of Hon. Mention and Ten Guineas to the author of the design under the motto " Horse Shoe " [*Adrian Berrington*].

(ii.) *The Owen Jones Studentship and* £100.

Three applications and drawings were received from the following :—

1. J. Harold Gibbons : 6 strainers.
2. W. O. Miller : 6 strainers.
3. H. B. Wilkinson : 6 strainers.

The Council have awarded the Certificate and (subject to the specified conditions) the sum of One Hundred Pounds, to *Mr. William Ongley Miller* ; and a Certificate of Hon. Mention and Ten Guineas to *Mr. Henry Robinson Wilkinson.*

(iii.) *The Pugin Studentship and* £40.

Six applications were received for the Pugin Studentship from the following :—

1. W. T. Benslyn : 4 strainers.
2. J. L. Berry : 4 strainers.
3. D. J. Chisholm : 4 strainers.
4. J. B. Cowper : 4 strainers.
5. H. Hubert Fraser : 4 strainers.
6. F. Hearne : 4 strainers.

The Council have awarded the Medal and (subject to the specified conditions) the sum of Forty Pounds to *Mr. Henry Hubert Fraser*, and Certificates of Hon. Mention and Ten Guineas each to *Mr. David John Chisholm* and *Mr. James B. F. Cowper.*

(iv.) *The Godwin Medal and* £65.

Six applications were received for the Godwin Bursary from the following :—

1. T. P. Bausor : 2 strainers.
2. H. V. Milnes Emerson : 6 strainers.
3. J. B. Fulton : 3 strainers.
4. F. Lishman : 6 strainers.
5. W. Milburn, jun. : 4 strainers.
6. A. R. Wells : 6 strainers.

The Council have awarded the Medal and (subject to the specified conditions) the sum of £65 to *Mr. William Milburn, jun.*

(v.) *The Tite Certificate and* £30.

Thirteen designs for a Sunk Garden surrounded by Loggie were submitted under the following mottoes :—

1. " Alpha " : 3 strainers.
2. " Apex " : 3 strainers.
3. Woman's Head (device) : 3 strainers.
4. " Jupiter " : 3 strainers.
5. " Palladio " : 3 strainers.
6. " Reverie " : 4 strainers.
7. " Rising Sun " : 2 strainers.
8. " Spes " : 3 strainers.
9. " Tite " : 3 strainers.
10. " Tomahawk " : 3 strainers.
11. " We have heard the Chimes at Midnight " : 3 strainers.
12. " Comprised Within " : 3 strainers.
13. " Esperance " : 3 strainers.

The Council regret that they are unable to award the Tite Prize, but they have awarded a Certificate of Hon. Mention and Ten Guineas to the author of the design bearing the motto " Jupiter " [*Mr. William A. Robb*], and Certificates of Hon. Mention to the authors of " Comprised Within " [*Mr. Anthony*

Raine Barker] and "Tomakawk" [*Mr. William Friskin*].

THE ARTHUR CATES PRIZE: FORTY GUINEAS.

Five applications were received for the Arthur Cates Prize from the following:—

1. Horace J. Ash: 6 strainers.
2. C. G. Boutcher: 6 strainers.
3. C. D. Carus-Wilson: 6 strainers.
4. W. Dean: 6 strainers.
5. A. G. Henderson: 6 strainers.

The Council have awarded the prize to *Mr. Charles Denny Carus-Wilson* [*A.*].

PRIZES FOR DESIGN AND CONSTRUCTION.

The Grissell Gold Medal and £10 10*s.*

Two designs for two Western Bays, forming a portion of a Vaulted Church, were submitted under the following mottoes:—

1. Villain: 5 strainers.
2. Fra Angelico: 3 strainers.

The Council have awarded the Medal and Ten Guineas to the author of the design bearing the motto "Fra Angelico" (*Mr. Charles Percival Walgate*).

THE ASHPITEL PRIZE 1909.

The Council have, on the recommendation of the Board of Examiners (Architecture), awarded the Ashpitel Prize (which is a prize of books, value £10, awarded to the candidate who has most highly distinguished himself among the candidates in the Final Examinations of the year) to *Mr. William John Roberts*, of Manchester, *Probationer* 1908, *Student* 1908, who passed the Final Examination November 1909.

THE TRAVELLING STUDENTS' WORK.

Godwin Bursar 1908.—The Council have approved the report of Mr. Arthur Halcrow Verstage, who was awarded the Godwin Bursary in 1908, and who reported on the "Galerie des Machines" of the Paris Exhibition of 1889.

Owen Jones Student 1908.—The Council have approved the work of Mr. A. E. Martin, who was awarded the Studentship in 1908 and travelled in France and Italy.

Soane Medallist 1908.—The Council have approved the drawings executed by Mr. George Drysdale, who was awarded the Medallion in 1908 and travelled in France and Italy.

Tite Prizeman 1908.—The Council have approved the work of Mr. George Drysdale, who was awarded the Tite Prize in 1908 and who travelled in Italy.

Pugin Student 1909.—The Council have approved the drawings executed by Mr. Sydney H. Miller, who was awarded the Studentship in 1909, and travelled in Lincoln, Cambridgeshire, and South West Scotland.

Saxon Snell Prizeman 1908.—The Council have approved the report submitted by Mr. William Milburn, jun., who was awarded the Saxon Snell Prize in 1908, and who reported on Hospitals in Germany.

The Deed of Award bears date 17th January 1910, and is signed by Ernest George, *President*; H. V. Lanchester and Alfred W. S. Cross, *Members of Council*; Henry T. Hare, *Hon. Secretary*; Ian MacAlister, *Secretary*.

The President's Election to the Royal Academy.

Advantage was taken of the gathering of members at the General Meeting last Monday to offer publicly to the President the congratulations of the Institute on his recent election as Associate of the Royal Academy.

Mr. JOHN BELCHER, R.A., *Past President*, addressing the meeting at the opening of the proceedings, said: Gentlemen,—Before the business of the meeting is proceeded with, may I be permitted, on behalf of the Institute, to offer our congratulations to the President on his election to the Royal Academy. His election has been a source of great pleasure to us all. It has not only given general satisfaction to his brother architects, but to the public generally, who have long since recognised in Mr. Ernest George an artist of distinction and an architect well known to the world. We are glad also that the event has happened during his term of office, though we should have been perhaps still more pleased if it had occurred sooner. However, such are the vagaries of an Academy election that, in spite of every desire on the part of the Painters and Sculptors to elect the right man, it sometimes happens that the best man is left out. Fortunately, the other evening this was not the case, and so we are able to offer to the President our sincere congratulations on the honour which has been conferred upon him, and we wish him long life in which he may still further advance the interests of our art.

Mr. Belcher's remarks were warmly endorsed by the meeting.

THE PRESIDENT, who on rising was received with hearty and prolonged applause, said:—I thank my old friend Mr. Belcher very sincerely for the kind things he has said; I hope he utters your sentiments. My desire is that my brother architects shall think this election a reasonable and a suitable one; that is the only opinion I care about, and it is very gratifying.

Post-Graduate Course at the University of London.

The University of London is arranging for the delivery by Professor Karl Pearson, M.A., LL.B., F.R.S., of a special Post-Graduate Course on "The Ideal Arch, Metal and Masonry, Theory and Design." The Course is to consist partly of lectures and partly of drawing demonstrations, and will be

held in the Lecture Room of the Department of Applied Mathematics, University College, commencing 21st January. The lectures are intended for students who have already had some considerable training and are well advanced in their mathematical studies. The following is a synopsis :— The Present State of Theory; The Ideal Arch; Elementary Cases of Ideal Arch; Ideal Catenary Arch; Ideal Metal Elliptic Arch; Ideal Masonry Pseudo-Elliptic Arches. The fee for the course is two guineas, but the Provost of the University has placed at the disposal of the Institute a certain number of nominations for members to attend these lectures on the terms that are offered to graduates—viz. One Guinea. Applications should be addressed to The Secretary R.I.B.A.

Henry Saxon Snell Prize, Royal Sanitary Institute.

The subject set by the Royal Sanitary Institute in 1909 for the Essay in Competition for the Henry Saxon Snell prize was "The Principles of Heating and Ventilating Public Buildings, with descriptive details and illustrations of the best systems." Fifteen Essays were sent in, and the Council of the Sanitary Institute have awarded the prize of £50 and a bronze medal of the Institute to Mr. Alfred E. Wheeler, of West Ealing. Two other essays showed exceptional merit, and the Council have increased the amount of the award by £20, and divided this sum equally between the authors, Mr. J. Roger Preston, of Stourbridge, and Mr. E. Thomas Swinson, of Feltham.

The Avery Library, New York.

Mr. Edward R. Smith, Reference Librarian of the Avery Library, communicates the following :—

In the letter of gift printed in the Introduction to the Catalogue of the Henry O. Avery Memorial Architectural Library (Library of Columbia College, 1895) occurs the following paragraph :—'It is our wish that the purchases made for the Avery Architectural Library be made exclusively by a commission of three persons—namely, the Librarian of Columbia College, the Professor or acting Professor of the Architectural Department of the School of Mines, and Mr. Russell Sturgis, of New York, whose successor, in case of his declination at any time, is to be selected by the other two members of the commission as above, to be always an architect, and not immediately connected with Columbia College.' In this way the founders of the Library gave to Mr. Sturgis a controlling position in its management, which was proper, as the conception of a standard architectural library in the city of New York was primarily his. During the last ten years of his life Mr. Sturgis approved every purchase made from the income of the Avery Fund. Mr. Sturgis's death has left this honorable position vacant. As his successor the surviving members of the Purchasing Committee of the Avery Library—the late Dr. Canfield, of the Library, and Professor Hamlin, of the Architectural Department—have elected Mr. Glenn Brown, Secretary of the American Institute of Architects and author of the monumental *History of the United States Capitol*. This selection is approved by Mr. Sturgis's friends and by Mrs. Avery and her son, and will commend itself to all those who are interested in the architectural profession and in the standard architectural library.

The Avery Library is the standard collection of the architectural profession in the United States. It is well endowed, generously supported, and protected by provisions of the letter of gift of the founder. It proposes to include all the best books on architecture. In addition to its architectural books, a large amount of material on subjects of collateral interest—painting, sculpture, and decorative design in general—has found its way into the collection. In the Avery collection there are between 18,000 and 19,000 volumes. In addition to this, the University Library possesses in its circulating department an indeterminate mass of artistic material which is probably equivalent to 10,000 volumes. Altogether, the University Library contains between 28,000 and 30,000 volumes on various subjects connected with the fine arts—a much larger number than is to be found in any other library in America. Thanks to the consideration and self-control of its readers, it has been found practicable to make all this material freely accessible to the general public, and especially accessible to the University public.

Commendatore Boni on the Misery of Rome.

The *Times* correspondent, writing from Rome on the 17th inst., says :—

Commendatore Boni [*H.C.M.*] has given in his resignation as a member of the Commission for the Zona Monumentale. In the summer of 1908 the *Times* gave a full account of the scheme which was to restore the archæological interest and guarantee the preservation in perpetuity of the tract of land which lay between the Porta Capena and the Aurelian Wall. It is with deep regret that I must now announce that the original scheme has been practically abandoned, and that Commendatore Boni, disillusioned as to the intentions of his colleagues, has declined all further share in the Commission. To use his own phrase, he has discovered that the only aim of the Commission is to convert a portion of the Via San Sebastiano into a wide boulevard, and he begs to be relieved from a charge which only means grief to himself, declaring at the same time his readiness to go on with whatever useful work lies still within the field of the Zona, such as that which has been begun on the Arch of Constantine, or the strengthening of the Neronian aqueduct, or the replanting of that portion of the Zona Monumentale which has been left a waste.

And so another scheme goes wrong; and the archæologists, the artists, and the Romans who really love their city must stand idly by and view another assault on her beauty and historic interest in the name of

"modern improvement." Tramways will run to the Via Appia, trim gardens shall deck wide roads, and tourists will no longer go on foot. The deference of the Roman Municipality to the foreign tourist—to the hotel-keeping interest presumably—is beyond all understanding. Why vast sums should be wasted in providing German and American visitors with a tea-garden, while the Roman poor go houseless and the Roman artist is robbed of the beauties he once loved to paint, can hardly be explained.

Commendatore Boni seems certainly unable to explain it to himself, to judge from the letter which, on his resignation from the Commission, he has addressed to Baron Sonnino, the Prime Minister. He writes:—

"The pigsties dug out of the rocks in the Via Flaminia, the inside niches and the outer buttresses of the Aurelian Wall, the remains of the Temple of Claudius and of the Circus Maximus, the foundations of the Temple of Venus and Rome, and the vaults behind the Basilica of Maxentius have been invaded by a gipsy race of troglodyte instincts. No need to go to New Zealand or Polynesia; the great centre from which Latin civilisation radiated can now offer examples of primitive savagery authentic enough to bring burning shame to the faces of those who are preparing for 1911 an ethnographical hodge-podge of dead things and old clothes. In the *tufa* cellars, beneath the stone vaults, between the pilasters of such walls as the pickaxe has spared, shut in with pieces of old tins and fragments of boards, live whole families of shameless and half-naked creatures, with their dirty offspring trained to steal firewood, break street lamps, or turn cart-wheels for a halfpenny. While all round Rome, on the banks of the Tiber and Anio, on the heights of the Via Cassia or Via Prenestina, there are, still unoccupied, uncultivated lands and deserted pastures; while the banks and institutions of credit capitalise their interest; while, in spite of the rise in rents, the revenue of the commune decreases, wasted in millions upon works which are only harmful—all this time these houseless wretches, in the horrible promiscuity of their asphyxiating cabins, in the dank darkness of their cellars, are multiplying ever more precocious recruits for the country's prisons. A systematic arrangement of existing tramway lines could easily be made to open out new suburbs where each family would have the means to breathe and earn its living. Instead of spoiling the Villa Borghese with dens for wild beasts, let us provide wholesome dwellings for these human creatures who, deprived of light, air, water, of everything which they need, grow every day nearer beasts within refuges which are morally and physically worse than any prison."

The Zoological Gardens in the Villa Borghese—begun less than six months ago—are nearing completion, though no beasts have yet arrived to occupy them. Years pass, and nothing is done to house those poor human wretches who, half clothed, less than half-fed, build their pitiful shelters of old tins and broken packing-cases against the sheltering walls of what ruins the Roman Municipality has spared. The Municipality which some years ago was elected on its promise of cheaper food and lower rents has infinitely raised the cost of both.

THE Council, approving a report of the Board of Architectural Education, have resolved that exemption from the Intermediate Examination be granted to students of Sheffield University on the same conditions as those applying to the Architectural Association.

Count Plunkett [*H.A.*] gave a lecture on the 11th of January before the Architectural Association of Ireland, his subject being Thomas Frye, the Irish artist.

ALLIED SOCIETIES.

Leeds and Yorkshire Architectural Society.

At a Meeting of this Society on 13th January Professor S. D. Adshead [*F.*] read a Paper on Town Planning, with special reference to the Housing and Town Planning Act and its bearing upon suburban dwellings. He urged the necessity for unity of purpose, and warned his hearers against the danger of isolated areas being "town planned" without due reference to the whole, a possible result of a too literal reading of the Act. The chief opportunity for real development was offered by the outer ring of undeveloped land extending beyond our suburbs. Here the choice of a suitable and utilitarian style for future buildings suggested wide possibilities. There was much to be said for the pedimented villa of the Regency and early Victorian periods, the fine simplicity of which, combined with its compatibility with modern needs, must appeal to the increasing artistic intelligence of the people. Referring to recent examples of suburban development, he pointed out that they must by no means be regarded as final results, but as experiments in a far-reaching movement. In planning the residential quarter of a town, the occupation and taste, the tendencies, either rusticated or refined, of its prospective population must all be equally considered, and a disposition and an architecture evolved at once utilitarian, harmonious, and beautiful.

MINUTES. VII.

At the Sixth General Meeting (Ordinary) of the Session 1909–10, held Monday, 17th January 1910, at 8 p.m.—Present: Mr. Ernest George, A.R.A., *President*, in the Chair; 24 Fellows (including 11 members of the Council), 38 Associates (including 2 members of the Council), and numerous visitors, the Minutes of the Meeting held 3rd January 1910, having been already published in the JOURNAL, were taken as read and signed as correct.

Mr. John Belcher, R.A. [*F.*], offered to the President the congratulations of the Institute on his election to the Royal Academy.

Mr. Harold Selwood Sawyer, *Associate*, attending for the first time since his election, was formally admitted by the President.

The Secretary having read the Deed of Award of Prizes and Studentships 1910 made by the Council under the Common Seal, the envelopes bearing the mottoes of successful competitors were opened and the names declared.

A Paper on CARR OF YORK having been read by Mr. Sydney D. Kitson, M.A. Cantab. [*F.*], and illustrated by lantern slides, a discussion ensued, and a vote of thanks was passed to Mr. Kitson by acclamation.

The proceedings closed, and the Meeting separated at 10 p.m.



ADDRESS TO STUDENTS.

Delivered by the President, Mr. Ernest George, A.R.A. [*Royal Gold Medallist* 1896], at the General Meeting, Monday, 31st January 1910.

BY established custom I address the junior members of our craft, those who have the inestimable gift of youth, and who will be filling the seats of their elders, I trust with benefit to the community.

Last year I gave my own experiences and expressed such views as I had arrived at, experience often showing what not to do again. Yet if we in life could be allowed a second innings, probably we might not do more wisely. It is the common lot to work, and it is a matter of the first importance that your work should be that which interests you. Instinct and inclination may be taken as guides in your general direction.

I trust you have chosen the study of Architecture because it is attractive to you. It would be dull work for you, and the results would be deadly dull, if you took to the artist's career as you would to brewing or baking, with the humble aim of making an income. The latter is rather illusory and unsubstantial, and when it comes is the result of much hard work in which the artist finds his pleasure, but which would be drudgery to the unillumined soul.

I assume, then, that you are each conscious of the divine fire; it remains with you to see that it burns clear. To this end earnest application is necessary, and a thorough education both in science and art as well as in wider fields of knowledge. You will be called upon to make sacrifices and to relinquish some of the amusements and harmless frivolities of youth if you are faithful to your art; your pleasure must be in serving that exacting mistress.

Architecture is associated with every condition of man, and it should find appropriate use either for the temple or the tavern. The problems that will come before you are endless, giving constant variety to the work. There will be no time for idling. A painter may desist from his work awaiting inspiration; the architect, when grounded for lack of matter, may turn from composition to the many practical details that his occupation demands. He must recognise that he is a man of business, with grave responsibilities to his client; he must not pose as the brilliant genius, above mundane affairs. He must cultivate methodical habits and exactness.

In the Schools or in the office you will find young men sharing your pursuits and aims; and among them may be good companions and friends. Seek the society of fellow artists of all kinds; be they painters, sculptors, or craftsmen, it will be a mutual advantage. You will still have time to spare for the outer world, where you must not be unseen or unknown: it is there you find the client who gives you the chance of beautifying the world. Cultivate tact in the treatment of the client when you get him; consider things from his point of view, his doubts and anxieties, financial and other, when starting on an important building enterprise. You probably know better than he does what he wants or what he ought to want; do not vaunt that knowledge, but

let your scheme seem to emanate from him. The plain man may tell you he "knows what he likes," and he possibly likes what is abominable; do not tell him so, he will be converted by degrees to like what is good. You cannot have all your own way, and your pet schemes may often be frustrated. After all, it is not your house that you build, though you are allowed the fun of shaping it. I have spoken of the natural man, the untutored, but I must acknowledge having worked for those whose refined tastes and judgment have been an unqualified advantage to the architect and to the building.

Education and cultivation of the mind should be always going on. Read much, and think much, and primarily make careful study of noble buildings; see why they impress you; measure, plot, and sketch them. Cultivate observation and memory, so that these fine things remain with you; they will influence your work for good when you think to be drawing upon your inner consciousness.

The things that Solomon knew are nothing to the catalogue of details that you are expected to grasp. It behoves you to know the history of architecture and to follow it through its many phases. It is well to be familiar with the literature of our art—the splendid books that have been produced in past times and in various languages. It is much to your advantage to have the command of foreign tongues. Indeed there is no branch of culture that is not a valuable asset in shaping the accomplished architect. I trust that you are gaining all the time a knowledge of construction, the paramount essential in the curriculum. Use every opportunity of visiting works in progress, builders' workshops and masons' yards; if also your hand can acquire some skill in any of the trades, it is all for your good. The limits of time and the shortness of life must be taken into account in making choice of subjects to be mastered.

While holding that for a modern-day architect this large mental equipment is desired, it is fair to remind you that good work has been done without it. A fortnight ago we had from Mr. Kitson an interesting Paper upon an architect who built many of the eighteenth-century mansions of Yorkshire. He was the son and the grandson of a mason, and was perhaps the last of the old order of men who accomplished their work with only the master-mason's traditions. Such a man was not disturbed by a knowledge of all the styles, nor by familiarity with all the building materials at our disposal; nor did the science of heating, lighting, and sanitation complicate his problem. Incidentally, it was mentioned that this provincial architect left 160,000*l.*; but that is a minor detail in the career of an artist. I can conceive that from such a man and under such conditions a quiet breadth of treatment would come naturally. The man of higher attainment and with knowledge of our many inventions would be under more disturbing influences.

Yet I think we all accept the fact that sound training is necessary. First and foremost, acquire the art of drawing; it is the language in which your ideas must be told. Whether you are to be an architect or a landscape painter, drawing is best learned by the study of the figure from life or from the cast; it is the best training for the eye, demanding accuracy and judgment. The hand and the mind should learn to work together, evolving schemes or forms, and feeling for that which is best.

Avoiding all tricks, acquire a pleasant manner of drawing, one that makes your building presentable; for I have seen fair composition so expressed as to look forbidding—perhaps with capitals, mouldings, and carving put in with a heavy hand, such detail making dark splotches of those parts which would be the high lights of the building.

But drawing has generally received its full meed of attention, and the greater danger is of regarding it as an end instead of a means. We have known such facility acquired that the hand has moved in advance of the mind—a fluency that speaks before thinking what is best to say. There is also drawing so pretty in its technique as to give fictitious attraction to a bad design.

The prizes we have the pleasure of giving to-night are for studies and compositions in some of which the drawing is, in my opinion, nearly as good as possible. My friend Mr. Macartney will be critically reviewing this work presently, and his discriminating judgment will probably find some faults. We have on the walls of this room the recent works of last year's prizemen, and I think you will agree that the fine colour-scheme of Puvis de Chavannes is beautifully rendered by the drawings of Mr. Martin. The admirable drawings by Mr. Drysdale and Mr. Miller speak for themselves.

Archæology will enter into your historical studies, but let it not be a matter of dry bones with you; do not follow it too far, troubling yourself with curious or unprofitable speculations; do not become the pedant. You should be conversant with the great achievements of all periods, yet I think the mind should be occupied with one method of building, of construction, and of treatment at a time. While examining the refinements and subtleties of Greek art and following on through the works of the great Roman builders, it would be undesirable to distract the mind with the study of the Gothic shrines, the soaring towers and spires of the North; they have their origin in another inspiration, another conception of the beautiful. There is the glory of dazzling light in the one case; while solemnity and mystery are the aim of the dim vaulted aisles of the mediæval sanctuary.

With all the striving after originality, I hope the rising architect will retain a reverence for Tradition. His best education is in the study of the fine work that his forerunners have done. As a change and recreation he has also the study of Nature, her laws, her methods, and her marvellous arrangements of colour. He must not, however, transplant the actual forms of verdure, chiselling them in stone, or using the fronds of ferns for metal castings.

Proportion is perhaps the most essential element of good architecture. It costs nothing, and it is applicable to the humblest as well as to the noblest of works. How is it to be secured? It is the product of the trained mind and the practised eye. True, it has been reduced to a science, and there are lines laid down, with mathematical rules to be observed—rules that can be applied to the just proportion of length to breadth and height.

But the beauty of proportion comes in with every detail: with doors, windows, and their appropriate mouldings; and I think it can only be secured by a refinement of knowledge and taste—the subtlety of feeling that is indispensable to the production of fine music or painting. It is in a measure intuitive to the artist, but it is also a faculty for cultivation, and perhaps is gained most by the mental assimilation of great work.

Texture, though secondary to proportion or shape, greatly affects the building; indeed, proportion is upset by over-large mouldings, keystones, or by sculpture in the wrong place or to a wrong scale. The touches that should be the crowning glory of a work may, by ignorance, be made subversive to beauty. I must be forgiven for putting sculpture under the head of texture to the building, but as such it must be taken into account.

The sizes and jointing of stone courses are a factor in the matter of scale. We know the charm of small bricks as seen in the Flemish buildings, and we admire the long thin brick in the Roman walls, while none can fail to be impressed by cyclopean stones as seen in the temple or in the bastions and walls that girdle an Etruscan city.

Smooth walls of ashlar stone or of gauged brickwork seem right with classic work and its delicate mouldings; while rough brickwork is in vogue for buildings of other types, some of our friends specifying that no mortar joint shall measure less than half an inch. The broken colour so obtained is pleasant, but the beauty of your work must not depend mainly on the accidents of texture and colour.

What may be said of colour? It has an influence that appeals to us directly, for our happiness or distress; light and darkness are in its train. As a nation we are not colourists, and we

have been shy of colour since the primitive Briton discontinued woad as a costume. Within the house there is the fear of losing light, while out of doors the feeling is that in our London streets all will presently be of the same low tone. There have been daring experiments with glazed materials, some with distinct success, but a shiny surface is not generally acceptable.

If for our street fronts we could be offered the frescoes of the Verona market-place, I am not sure that they would be cheerfully accepted, and if we should have them in their pristine condition I am sure we should consider them crude and garish. Our taste is for the old Masters, old tapestry or stuffs, when colours have been lowered by the passing of three hundred years. Perhaps it needs a sunnier clime than ours to appreciate real colour.

As a broad principle I think that raised surfaces and colour are seldom wanted together. A coffered ceiling or a good piece of modelling with its projections well considered does not want its background picked out with colour—its light and shade are an equivalent to colour; also a fine painted or mosaic ceiling is best as a flat or curved surface, or with only the slight projections of gesso.

We know that the Parthenon and other inimitable Greek monuments were originally in colour, the mouldings picked out, while the marble gods and goddesses were tinted in flesh tones with coloured draperies. To me it seems that breadth would be exchanged for realism, the Greek masterpieces sharing the quality of waxwork; but I dare not question what was done by the consummate artists of the great age.

In mediæval times the Gothic churches and castles had their shafts, ribs, and mouldings in positive colours; the devices of heraldry supplying the *motif* of decoration, and the scheme, though vivid and crude, must have been splendid. The full glory of colour is found in fine stained glass, and that is at its best when throwing its tints on uncoloured walls. Walls of precious material or rich in decoration are best under the unobscured light of day.

In the study of colour make careful notes of such good combinations as you find either in man's work or in Nature, especially noting the quantities in which they are used. The blue corn-flower is gem-like when dotted in a field of golden corn, but it has an altered value in larger mass, as when covering the human frame. As a reaction from varied and disturbing colours, the simplicity of whitewash has been found refreshing; in broad light or in reflected light it is altogether beautiful. Brown paper was discovered as a pleasant and retiring background, and I am told of a house that a young enthusiast papered thus from attic to basement. Another instance I call to mind of a room painted black; but I do not feel that a resort to brown paper, to black, or to whitewash is solving the subtle problem of colour.

I will not talk to you of Styles, to advocate one or to disparage another; we have ceased to fight on that field. I will only say that the qualities making for good or bad are, in all styles, the same—viz., truth of construction, justness of proportion, breadth and simplicity, and above all simplicity. All the tawdry vulgarities that shock you are the violation of that quality; efforts after the pretentious or pompous; the assumption of something that is not. A building may be rich and yet broad in treatment; our Houses of Parliament may be taken as an example. The fascinating devices of Pugin give richness and texture to the whole surface, but they are so employed that the broad masses of Sir Charles Barry's composition only gain thereby. In contrast to this, the "Horse Guards," Whitehall, is a building severely plain, hardly a moulding to arches or openings, yet it gives almost an impression of richness by the proportion and disposition of the parts and the skill in arrangement of its lights and shadows. Misplaced ornament is the bane of architecture, as is also ornament that is out of scale.

We have touched upon the many things that it is good for you to know and to do; though you may be an Admirable Crichton, you will not accomplish all. You must make choice of that which comes best to you and for which you have affinity. In some cases combination meets the

many requirements of the architect, who must play the parts of artist and man of business. If any two of you, quite sure of one another, agree thus to divide the work, it may be for your mutual happiness. The work will be done with fewer disturbing interruptions, and you will have companionship to lighten the worries that must arrive from time to time.

I have said study simplicity in design ; I would further urge simplicity of life. Let your wants and your encumbrances be few, that you may be free in the race. Concentration of mind and of aim is essential if you are to be successful. I mean real success, which is not always to be measured by income. Comfort, cushioned ease, and expensive cigars are not a stimulus to the artist ; discipline he needs, and the best form is self-discipline.

The Duke of Wellington said that Waterloo was won in the cricket field—and manly sport has had a fine influence on our race ; but sport has become with us a fetish to be worshipped. Sir William Richmond has been bold enough to say that " games will be the ruin of England " ; Rudyard Kipling created a shock when he spoke of " flannelled fools " ; and we must admit that the devotee of art can hardly be prominent as an athlete ; he starts with a different temperament, moreover he cannot spare the time to become distinguished in various sports, although we have among us one or two brilliant exceptions to my theory. To you the sketching on Saturdays is more important than the following of games, and your life will take different lines from that of the man of leisure or of commerce.

I have before expressed my belief that it is well you should have to live by your art. It is good for you personally, and I think it is also good for the work. An architect has no opportunity of producing pot-boilers even when money is scarce. I do not know how many of you have been born with the traditional silver spoon in the mouth—I do not specially congratulate those who have. You have the harder fight against the spirit of indolence that is in us all. There is also the temptation to use the brains of others if you have them at command, to become mere dilettante, or, saddest, to become the art critic instead of the art worker.

When sufficient knowledge and discrimination for the purpose have been attained by the student, foreign travel comes to him as an inspiration. With delight he will see in substance the monuments that have been familiar to him only in diagrams and text-books. There is joy in the freedom of life, and fascination in the change of scene, of climate, and of human interest. With these pleasant distractions discipline and application are specially called upon for the gathering of that which is precious and the refusal of all that is ephemeral or meretricious though attractive.

It is our desire that those who go out with our travelling scholarships should accept the task of making a thorough and exhaustive study of one or more notable buildings, the intimate knowledge of which will be a lasting influence. There is the further interest that the best of such work will be published in some permanent form, making a contribution to our architectural records.

For those who are not privileged to make the grand tour there are priceless treasures to be found in our museums ; doorways, fountains, monuments, and bronzes of the great periods, and those now seen judiciously placed and well lighted in their spacious new home, accessible to all, and giving the student a quieter time for measuring and drawing than the traveller would obtain in a continental street. These objects demonstrate the treatment and workmanship of the artist and craftsman, but much of their meaning is lost when these features are divorced from their natural surroundings. The student must look at things as a whole, noting the important element of scale ; he must not be absorbed by details.

I have spoken of foreign travel with its advantages and pleasures, but how much we have close at hand that is an education. With Hampton Court on one side of the town, Greenwich Hospital on the other, our City itself with its domed centre, its many churches, Chelsea Hospital, and Somerset House, to say nothing of modern work, some of which I hope reaches a high standard and is worth your consideration.

I will not define how far sketching, painting, or etching may occupy your time with the many pursuits that are necessary; they form a happy recreation, a change of vision, and are restful while training the hand, the eye, and the mind. If facility is attained such work may become too attractive, taking the place of the more plodding and painstaking duties that claim your attention.

Our technical schools, State or rate aided, have been turning out batches of young men partially equipped for doing your work, and they will be provided from the public funds with drawing boards and T-squares for the purpose. Till they get outside the schools they do not learn, poor fellows, that the field is overcrowded and that we have no use for them; there is at the same time a great lack of good mechanics, a deficiency which they ought to supply.

There is an effort among ourselves to raise the standard, both social and educational, of the practitioner, believing that thereby the quality of work will be raised. It will be only by the use of your higher endowments that you will keep the field. Our "art" teaching has been fraught with curious results, and I fear we have many bad artists who might have been fine craftsmen.

It is worth much to you to acquire literary style, your letters and reports being terse and clear of verbiage. The art of public speaking should be part of your equipment; you may take the advice as sound from one who lacks it. It will always be pleasant in this room to hear the voice of any young man who will add to the interest of the subject considered; he may often contribute profitably to the discussions. I speak of debating, not of bear-baiting. We have instances, fortunately rare, of young persons seeking prominence by the latter process; perhaps giving notice to "ask questions"—a string of them, pertinent or impertinent. Of all things avoid professional politics and cabals. They disturb that tranquillity which is essential to the performance of good work, while they occupy time that should be given to the claims of art.

In this Institute, our Brotherhood, our aim must be to help one another. We do not all meet with equal fortune, and if success comes to you give a helping hand to your fellow who has less luck in the lottery. Fortune is a fickle dame, and none can tell which of you now entering the arena is to be the great architect of the future. The ranks are well filled, I will not say overcrowded, but for those of you who use your opportunities aright, who train seriously and possess your own souls, there will be work for your hands to do.

There is with us the beginning of an appreciation of architecture. There is the idea, comparatively new to us, called Town Planning; the knowledge that we must work not only on our own plot, but consider also our neighbour, combining with him for a pleasant lay-out, a monumental disposition, and grouping of buildings.

We are in the habit of judging the standard of architecture by the public or prominent buildings of the year, and by such pretty pictures as appear in the professional journals. It is painful, however, to remember that these are a very small portion of the *building* that is done in the country, the mass of which knows no architect and is subject to no laws. In the future we trust that the speculating builder, and the hard-headed lawyer who finds him the money, will realise the advantage of the architect's help to improve his plan, to give pleasant proportion to his building, and a semblance to some recognised style, while saving him his present outlay on lavish and misplaced ornament.

I verily believe, in the period that you enter upon, architecture will rise to a higher level than it has known in our day. I earnestly hope, to achieve that end is the steadfast aim of you architects of the future. I wish you good luck, and a large store of happiness to be found in the work which it will be your privilege to do.

CRITICISM OF DRAWINGS SUBMITTED FOR THE INSTITUTE PRIZES AND STUDENTSHIPS 1909–10.

By Mervyn Macartney, F.S.A. [*F.*].

Read at the General Meeting of the Royal Institute of British Architects, 31st January 1910.

Mr. President and Gentlemen,—

I FEEL deeply honoured in having been invited to review the works submitted for the Institute Prizes and Studentships. It is a privilege as well as an honour; but privileges, to be worth anything, are generally hedged round with duties, and so it is in this case. To discharge conscientiously this task is no light matter, especially for one, like myself, who has never entered any of these contests. I have never heard "the bells chime at midnight," nor have I racked my brain for recondite mottoes like "Touchsoane." There is this much to say for these competitions, that I firmly believe that they are awarded by the judges without fear or favour to the design or drawings considered best. I feel certain that your tribunal is absolutely impartial; and this fact must be of enormous value to you when entering these lists. It mitigates the soreness of defeat to know that you have lost because a better man has won. On the other hand, nothing discourages a man more than the feeling that he has been unjustly dealt with, especially when he is young and has not had any experience of the world's wicked ways. We should all be happy to stand in the shoes of the winners, and set out on our travels through the enticing lands which history points out as the birthplaces of our Art—to Italy, to Greece, to France, or, less distant, to wander through our own land with all the blithe carelessness of youth, the enthusiasm, the whole-hearted devotion to Art. And to those who have failed I would say, you can at least hope to follow them later. Although your work in the present instance has proved unsuccessful, it will surely, by the experience, by the increase to your knowledge, help to make you cultivated architects. It will do that at the very least; it may also lead you to victory another time.

But, after all, the reward is his who has through months of self-denial carried to completion a definite and difficult piece of work. And the feelings of Gibbon on relinquishing his pen after his labours on *The Decline and Fall of the Roman Empire* are not very dissimilar to those of the weary student who lays down his pencil with his last drawing finished.

I may be allowed to say a word on the value of these competitions. As you all know, architectural education at the Beaux-Arts is almost entirely a matter of "concours," and those, too, of a magnitude that would make most of us grey-headed; but you also know with what results. The great American schools do no less, and their recent achievements are no less astonishing. There may be some disadvantages in this system of education, but they seem to me counterbalanced by its obvious advantages. Apart from the effect on the student of competing with his fellows, and learning from his blunders, and getting rid of all the nonsense he may have imbibed, it prepares him for the wider strife of his later life. Most public buildings nowadays are put to competition, and offer to the young man unequalled opportunities of displaying his ability. I may remind you, too, that it has nearly always been the same; you all know that Brunelleschi was unsuccessful in a certain competition for bronze gates, and yet lived to crown St. Mary-of-the-Flower with a great dome.

It is sometimes objected that these competitions are too academic in character, too much removed from everyday practice to be of much use to the student. From this view I entirely dissent. The exigencies and shifts of real practice will come soon enough, and these academic exercises, while teaching design, give to the intellect an agility to be acquired in no other way;

and therefore I congratulate all students whose courage has successfully carried them through a long and arduous undertaking.

Two main branches of work have to be considered—studies of ancient building and original designs. Too much stress cannot be laid on the utility of the first of these studies. In no other way can the student learn to understand architecture as a thing of three dimensions—a thing solid and stable like the rocks and hills; a thing, like these, to stand through years and centuries exposed to the ravening teeth of time. This is one of the most useful lessons the student can learn—that architecture is not paper. By studying ancient buildings he will learn to understand the weights of architectural features, their values. If he analyses the impression made on his mind by a building, he will discover the qualities that make for sound architecture—repose, dignity, and unity. However much he is interested in detail, he will find that these are like notes of music—serving merely to build up some grand symphony of sound.

The greatest thinker of the eighteenth century, one whose mind like the very sun irradiated everything, likened architecture to "frozen music." I like this simile, for it seems to crystallise in two words all criticism of great architecture. And no one who has been moved and delighted by some fine building will, I think, be inclined to doubt its truth. So that the student should try to discover the vital qualities in the building he chooses to delineate, and pay more attention to the masses than to the details which only help to build up the main conception. In his drawing out he should endeavour to be as clear and concise as possible, trying to express the spirit of the work—as far as this can be done by geometrical drawing—rather than his own idiosyncrasies.

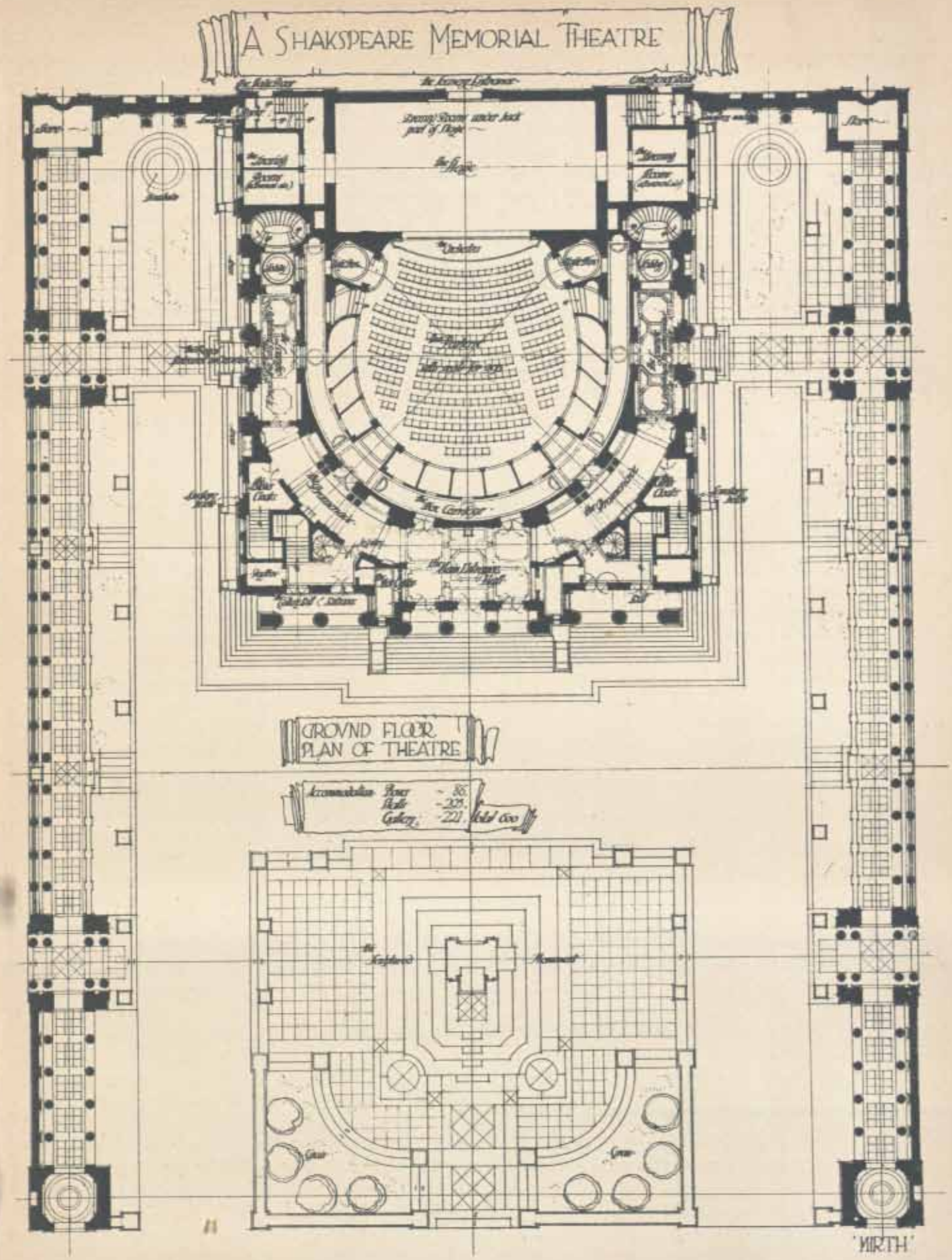
With the original designs, clear and simple draughting should be striven for. But this is secondary to the design, and the student before entering this phase of his work should have made himself quite clear as to the requirements of the programme. From this brief premise let us pass to a short review of the work itself which has been submitted in the present instance.

The drawings as a whole are not of transcendent excellence. Indeed, I consider that, taking them *en masse*, they are below the average. There are some good examples of draughtsmanship and colour, but they are few. There is little unanimity in the rendering of drawings, which, by the way, adds considerably to the difficulty of judging, and points to the fact that there is at present no definite teaching in this country. There are almost as many styles of drawing as there are candidates. Some are in the French style, but they lag far behind the real thing; others are done in a slap-dash "Art Nouveau" with a Teutonic touch that is rather amusing.

The good old-fashioned type has still its followers. Originality has a certain charm, and has the additional, questionable, advantage of attracting attention. This is notably the case in the design "Horseshoe," awarded the second prize in the Soane Medallion competition. But it would be impossible to live in the same house with that perspective.

Now, if one looks at the drawings collected at the Victoria and Albert Museum, one is struck by the sobriety and dignity of the exhibits. There is no attempt to advertise the cleverness of the draughtsman. It is good honest work, and attempts only to render truthfully what it set out to do without any *arrière pensée* of applause. It may be said here that this quiet, unobtrusive draughting requires more skill and patience than the slap-dash method. Perhaps the extensive use of perspectives is the cause of this anxiety to shine. Personally I instinctively decline to be drawn by the alluring and meretricious. I should recommend students to leave out all unnecessary details, such as figures and motor-cars—the guardsman and nurse-maid seem to have had their day, but other figures as ill-advised and as badly drawn have taken their place, which always remind me of the blind man's remark in the New Testament that "he saw men as trees walking"; and as for the motors—no self-respecting inspector would give them a licence.

Taking the awards as they appear in the Institute JOURNAL, we have the measured drawings first. The first prize is awarded to the author of a set of drawings showing the Wellington monu-



R.I.B.A. PRIZES AND STUDENTSHIPS 1910.

SOANE MEDALLION.—FROM DRAWINGS SUBMITTED BY MR ALICE G. HORSNELL, AWARDED THE MEDALLION AND £100.

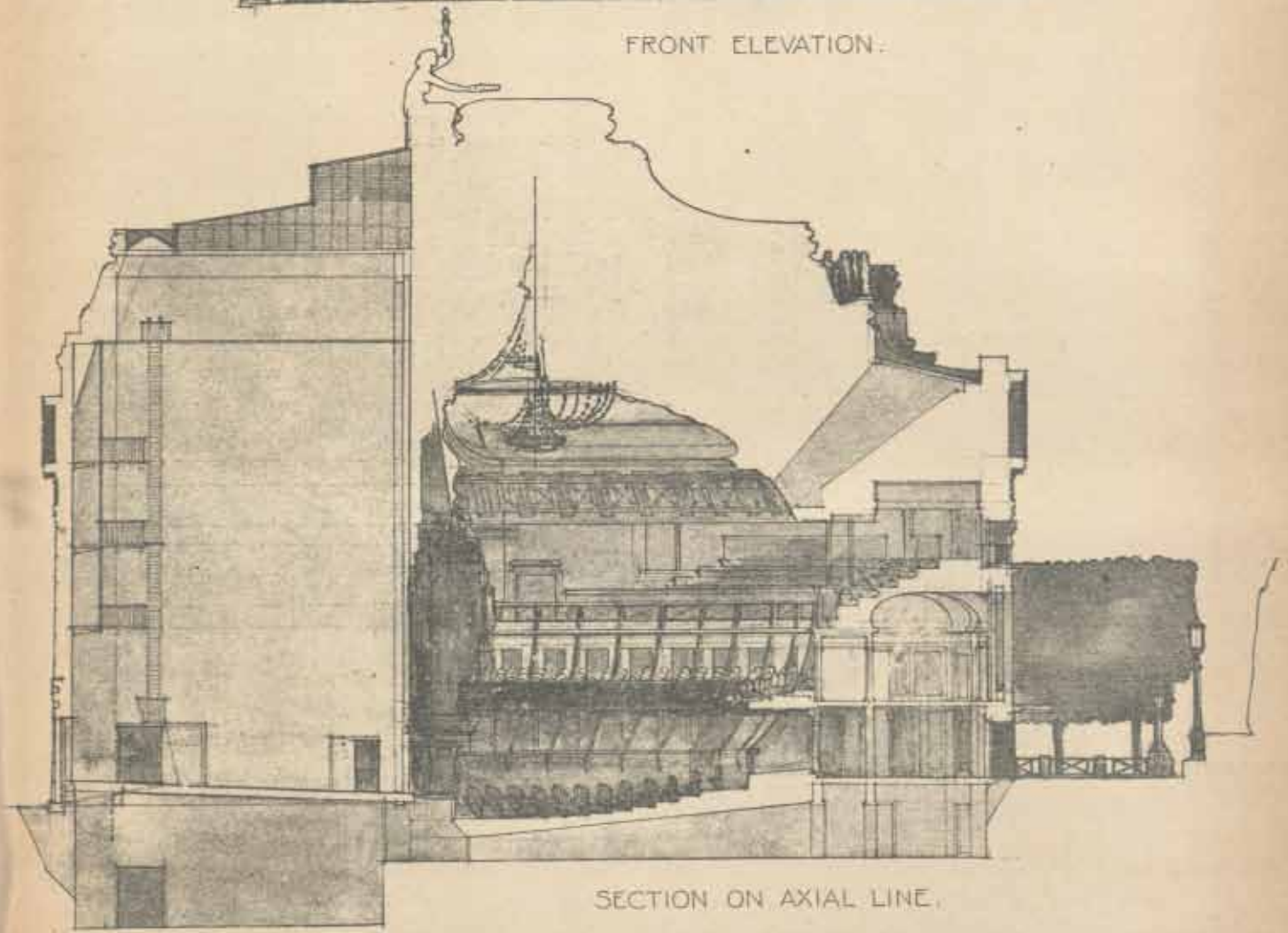


R.I.B.A. PRIZES AND STUDENTSHIPS 1910.

SOANE MEDALLION.—FROM DRAWINGS SUBMITTED BY MR ALICK G. HORSNELL, AWARDED THE MEDALLION AND £100.



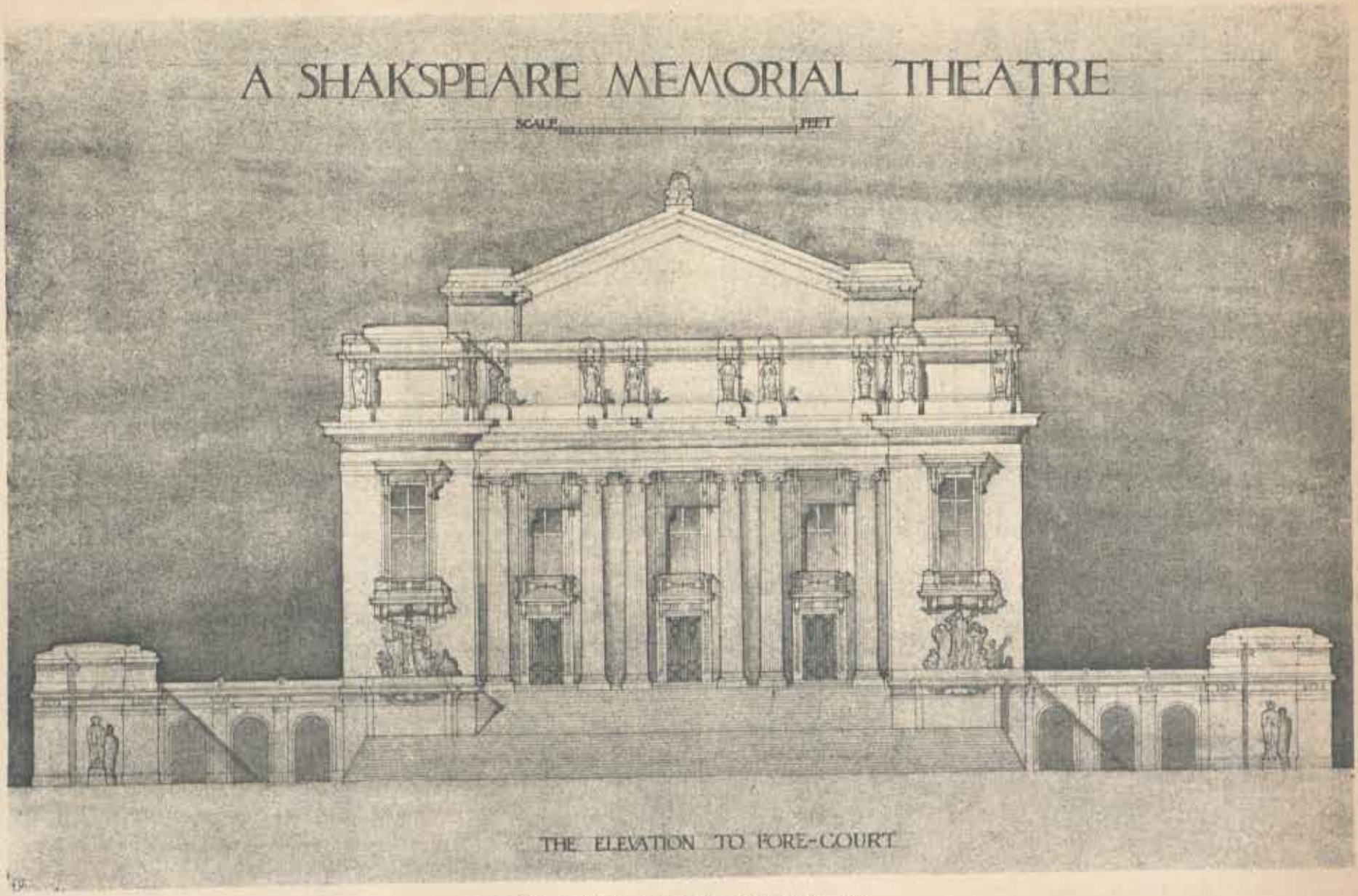
FRONT ELEVATION.



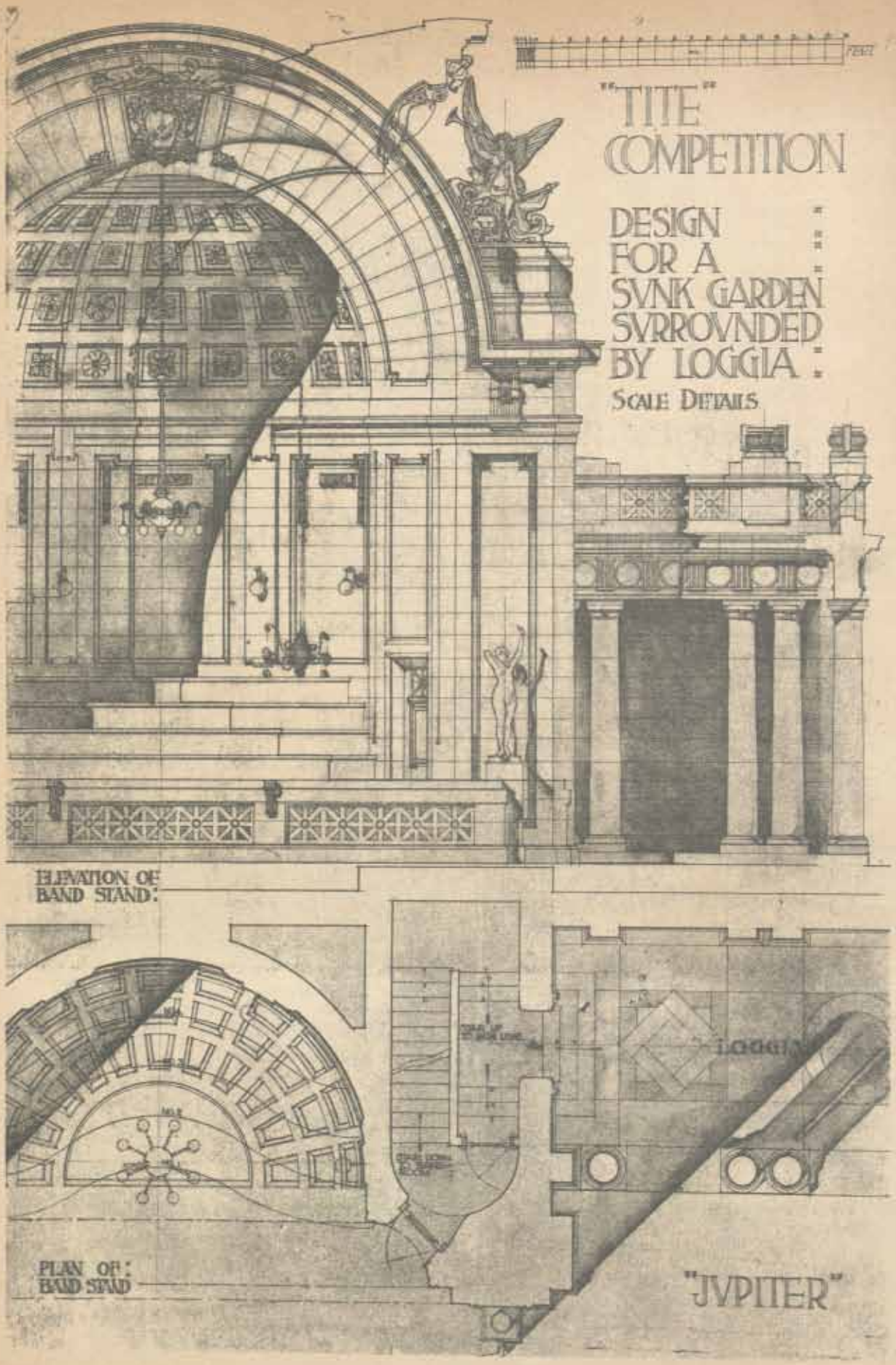
SECTION ON AXIAL LINE.

R.I.B.A. PRIZES AND STUDENTSHIPS 1910.

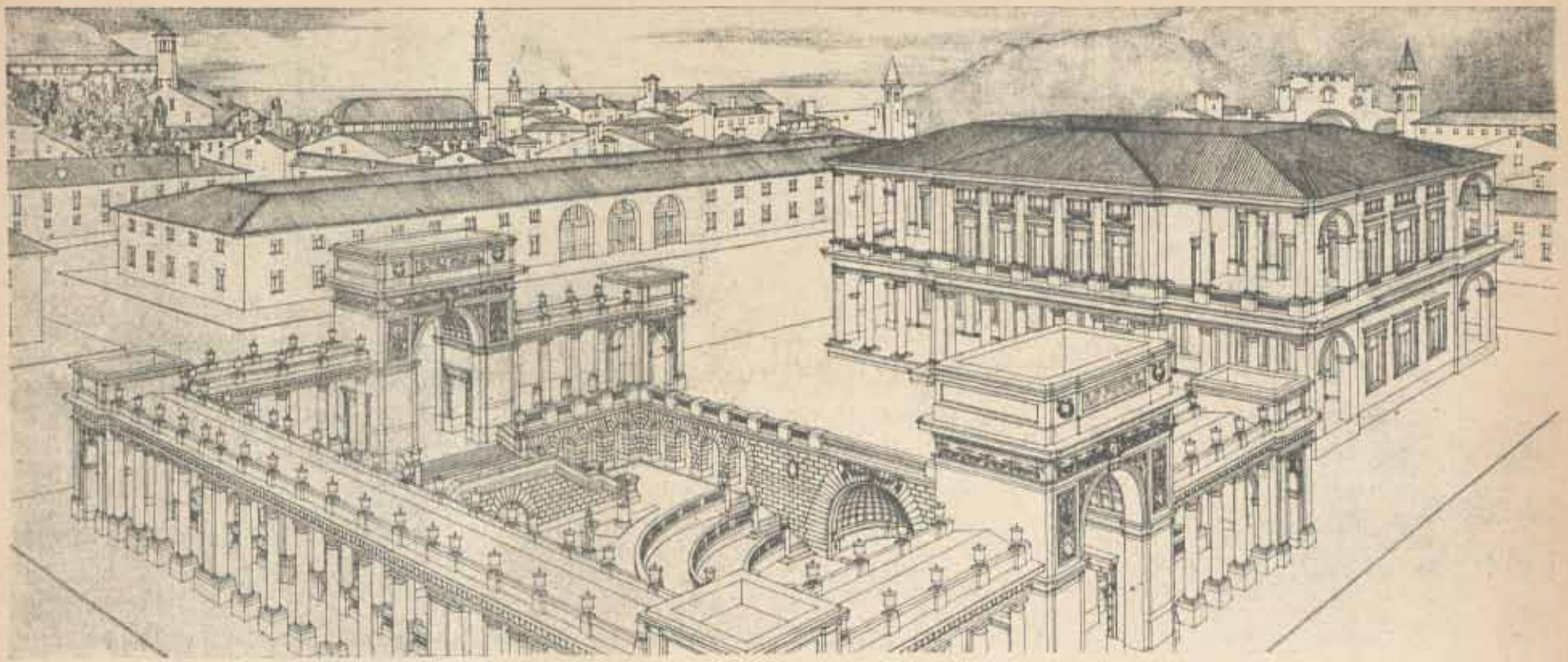
SOANE MEDALLION.—DESIGN FOR A SHAKESPEARE MEMORIAL THEATRE: FROM DRAWINGS SUBMITTED BY MR. ADRIAN BERRINGTON ("HORSE SHOE"), AWARDED CERTIFICATE OF HON. MENTION AND £10 10S



R.I.B.A. PRIZES AND STUDENTSHIPS 1910
FROM DRAWINGS SUBMITTED BY MR. W. J. KIEFFER ("FORWARD")



R.I.B.A. PRIZES AND STUDENTSHIPS 1910.
FROM DRAWINGS SUBMITTED BY MR. WILLIAM A. ROBB, AWARDED
CERTIFICATE OF HON. MENTION AND £10 10S.



THE TITE COMPETITION

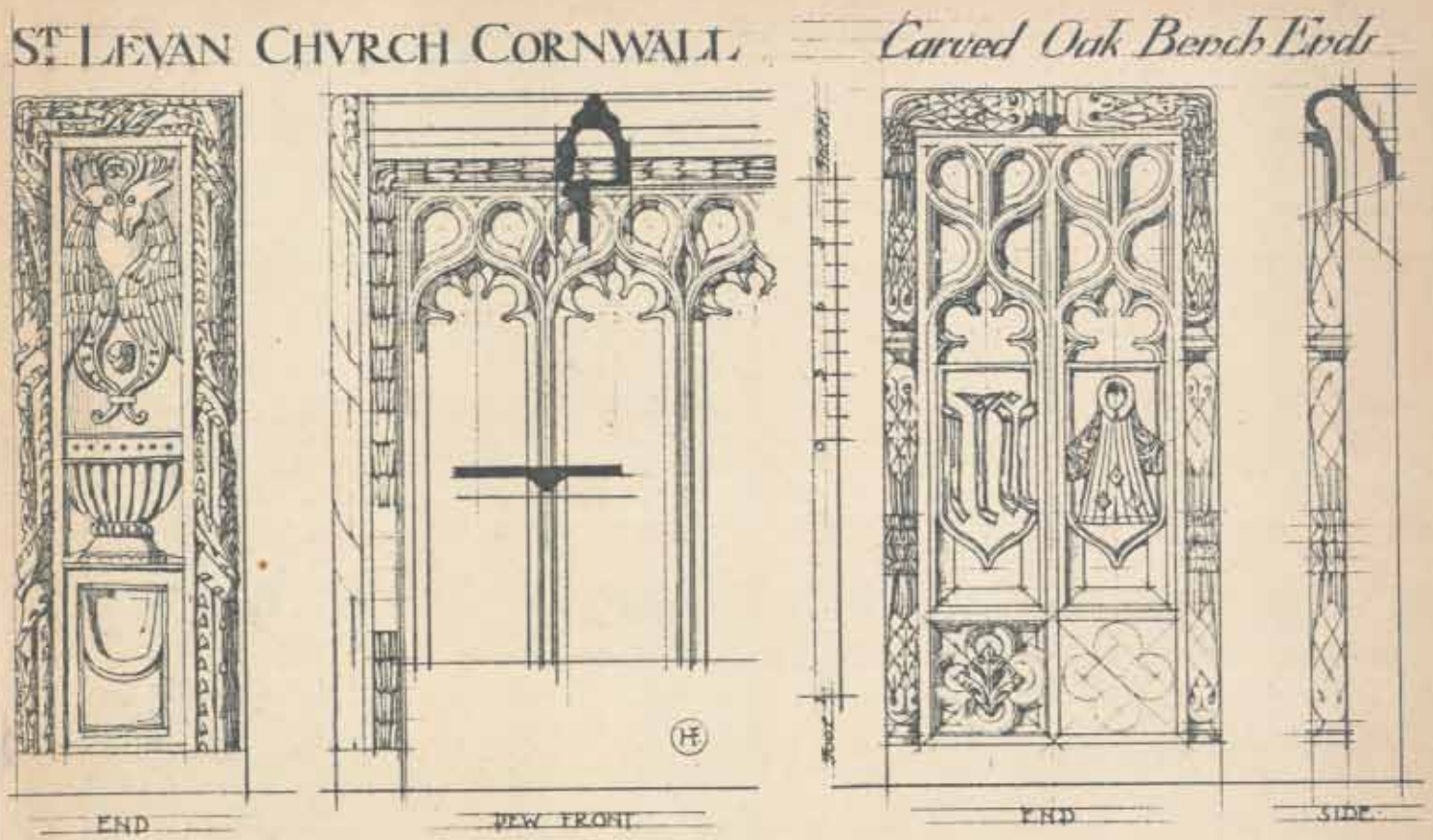
A SUNK GARDEN SURROUNDED BY LOGGIE FORMING THE FORECOURT TO A CITY HALL

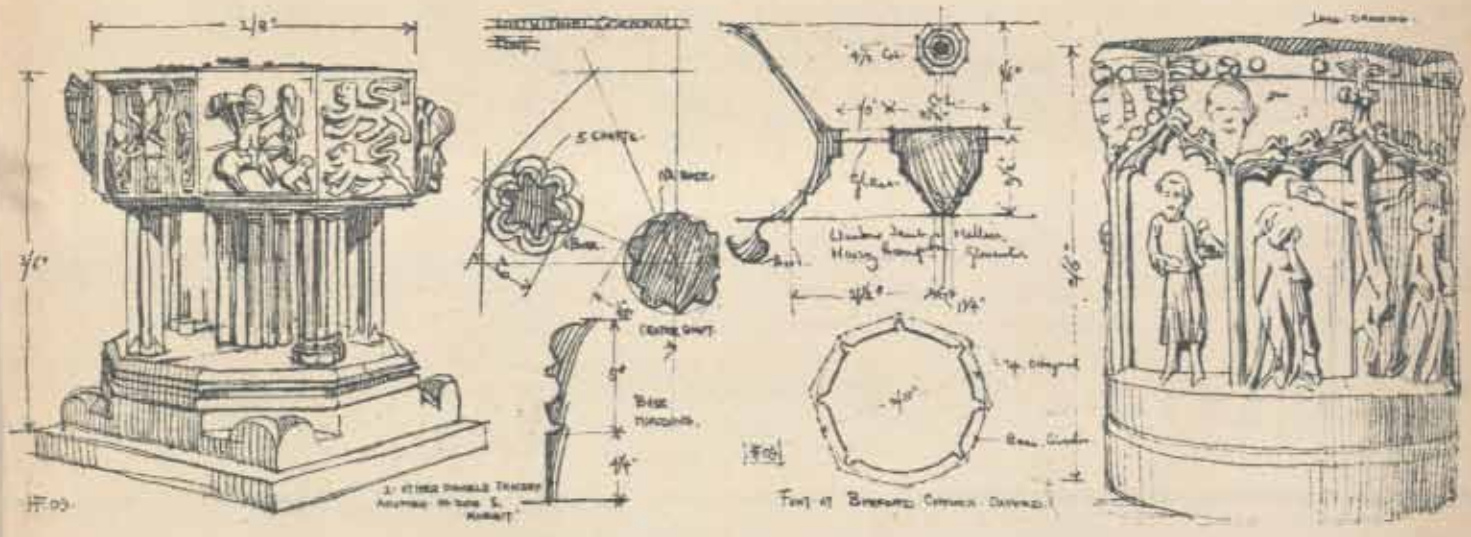
"TOMAHAWK"

PERSPECTIVE VIEW

R.I.B.A. PRIZES AND STUDENTSHIPS 1910.

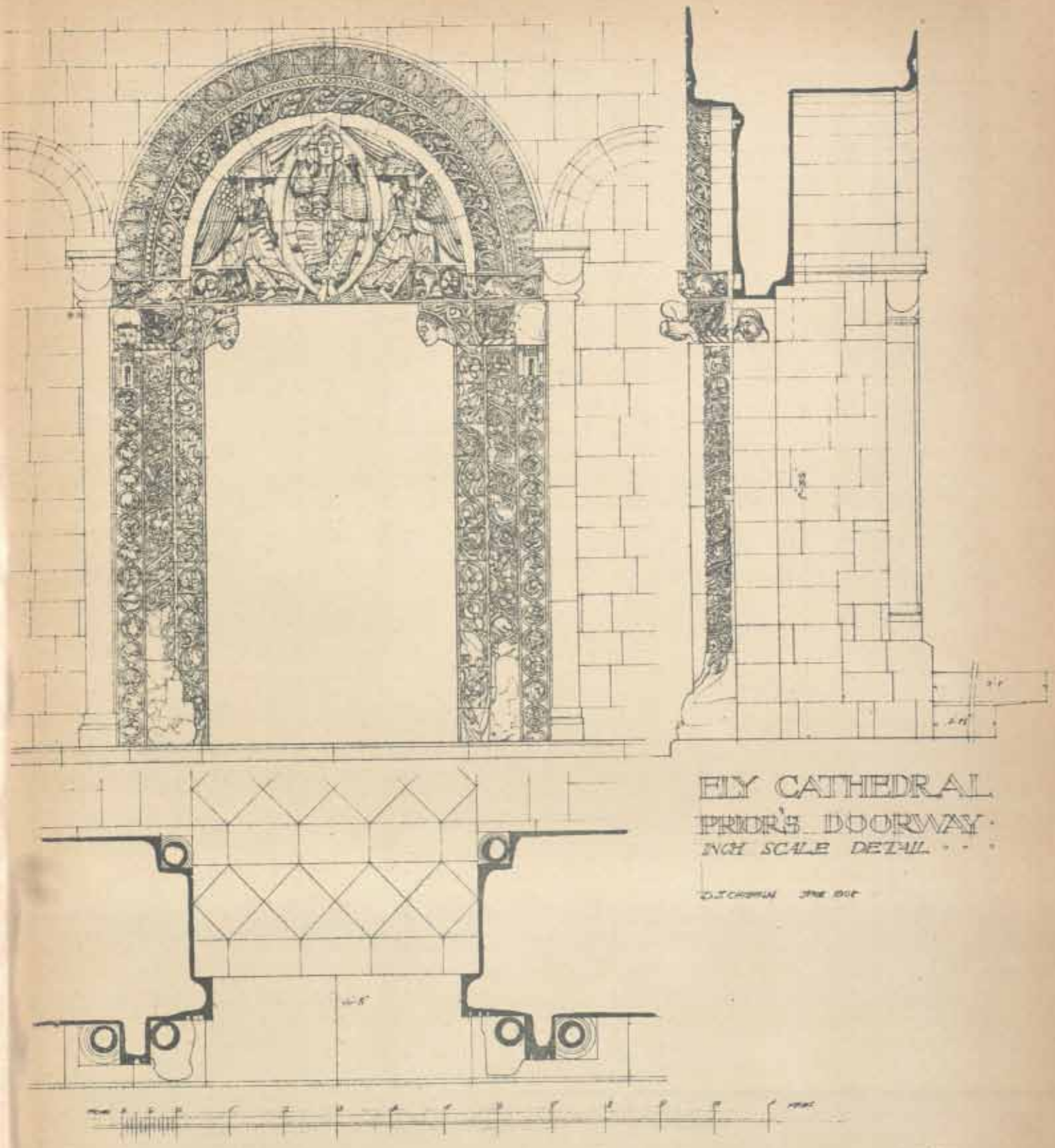
FROM DRAWINGS SUBMITTED BY MR. WM. FRISKIN, AWARDED CERTIFICATE OF HON. MENTION.





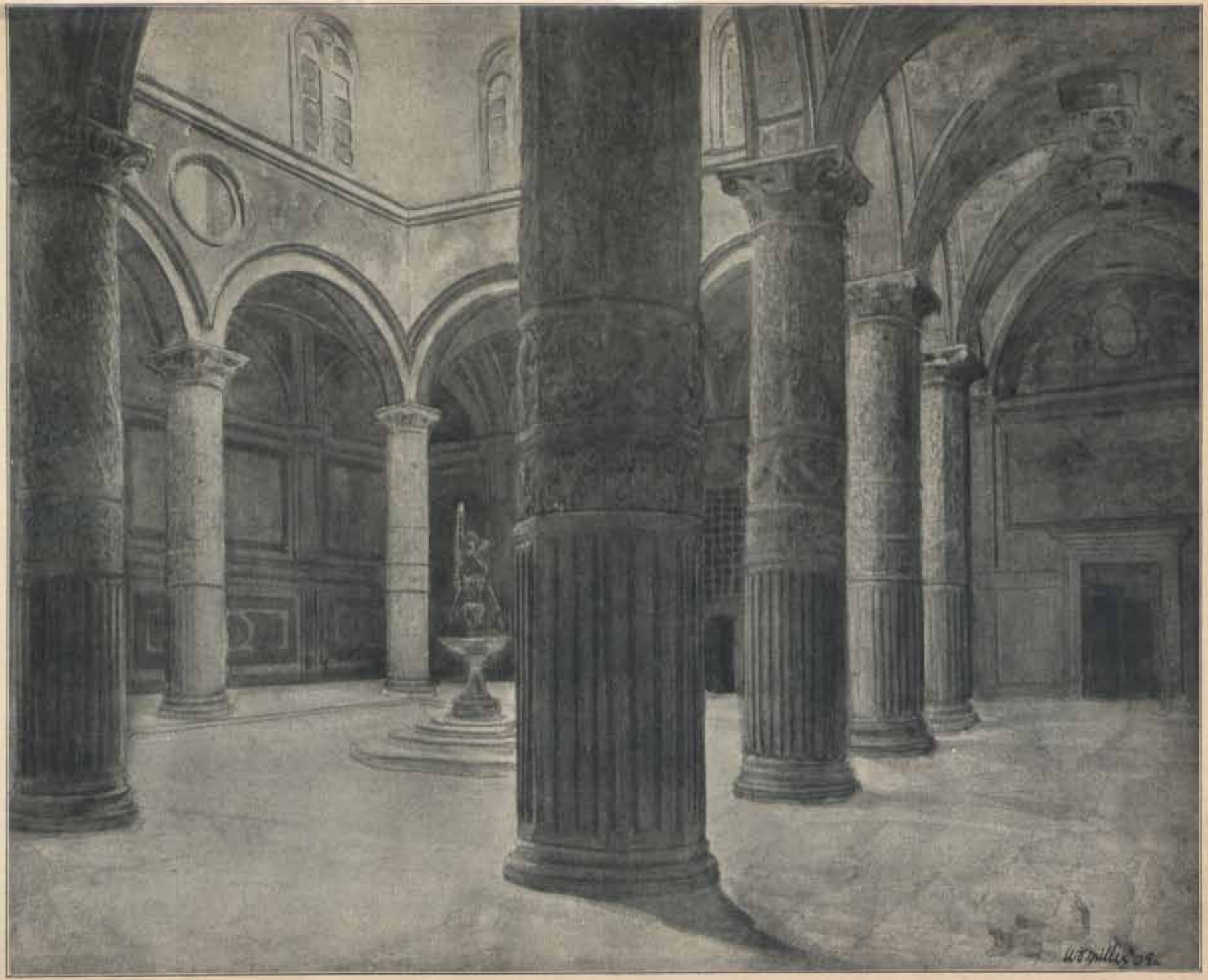
R.I.B.A. PRIZES AND STUDENTSHIPS 1910.

PUGIN STUDENTSHIP.—FROM DRAWINGS BY MR. H. H. FRASER, AWARDED THE PUGIN MEDAL AND £40.



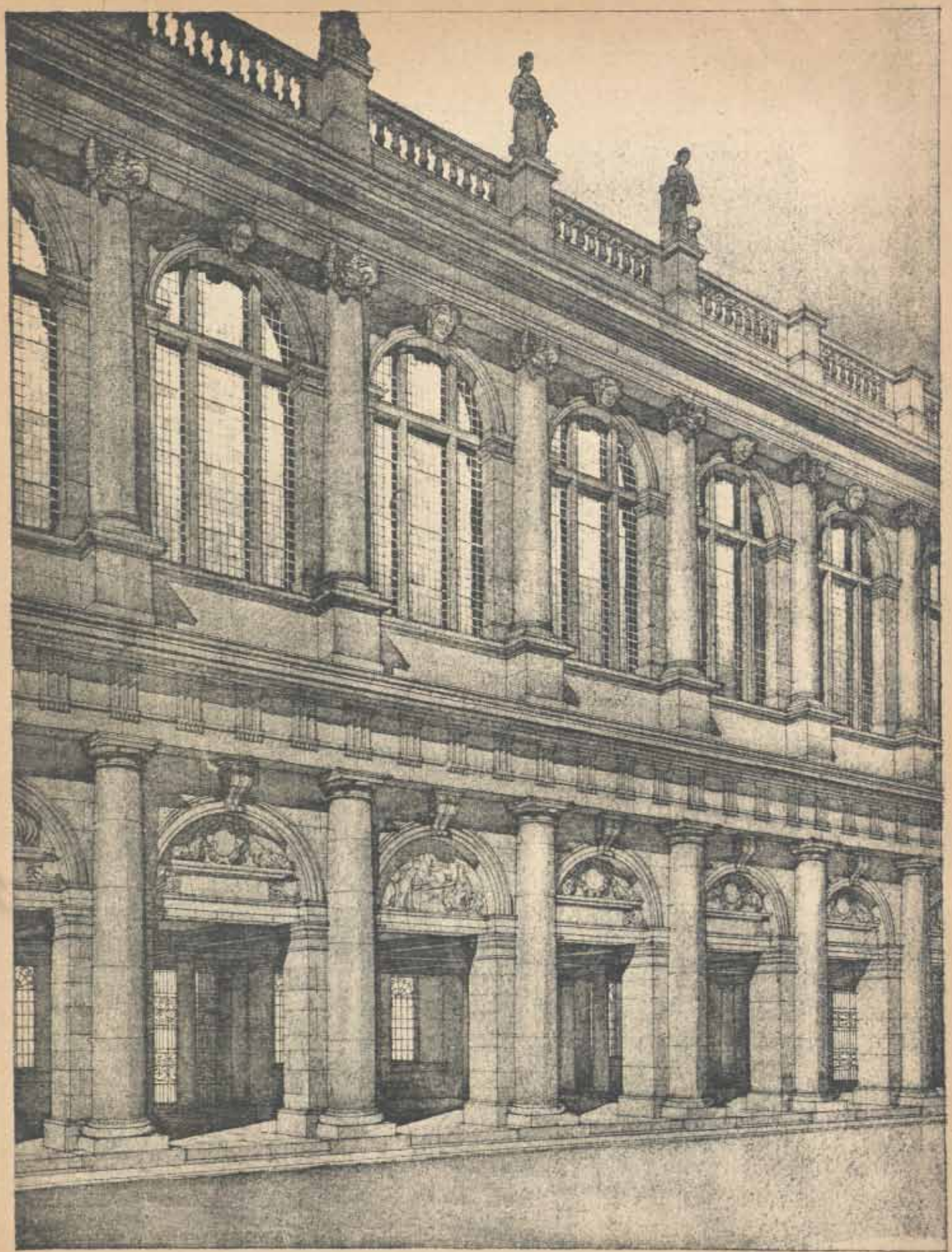
R.I.B.A. PRIZES AND STUDENTSHIPS 1910.

Pugin Studentship.—From Drawings by D. J. Chisholm, awarded Certificate of Hon. Mention and £10 10s.



R.I.B.A. PRIZES AND STUDENTSHIPS 1910.

OWEN-JONES STUDENTSHIP: STUDY OF THE CORTILE IN THE PALAZZO VECCHIA, FLORENCE: FROM DRAWINGS BY W. O. MILLER, AWARDED STUDENTSHIP AND £100.



R.I.B.A. PRIZES AND STUDENTSHIPS 1910.

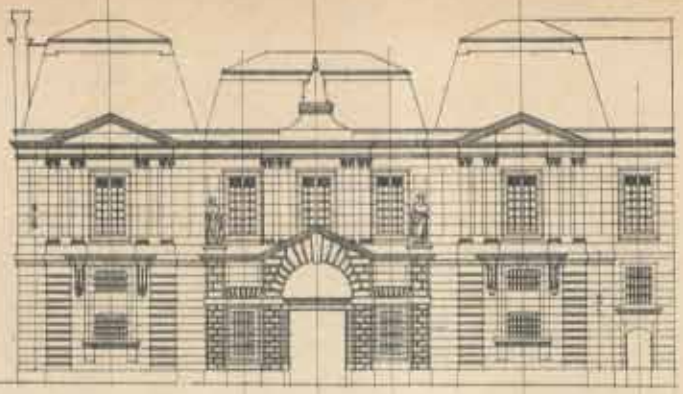
ARTHUR CATES PRIZE.—TRINITY COLLEGE LIBRARY, CAMBRIDGE: FROM DRAWINGS BY MR. C. D. CARUS-WILSON, AWARDED THE PRIZE OF FORTY GUINEAS.



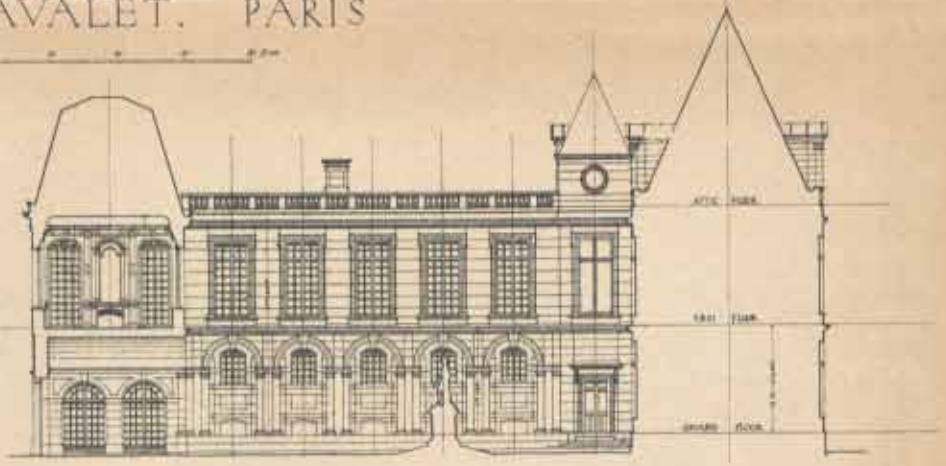
R.I.B.A. PRIZES AND STUDENTSHIPS 1910.

ARTHUR CATES PRIZE.—WATER-BASIN, SIENA CATHEDRAL: FROM DRAWINGS SUBMITTED BY MR. A. G. HENDERSON.

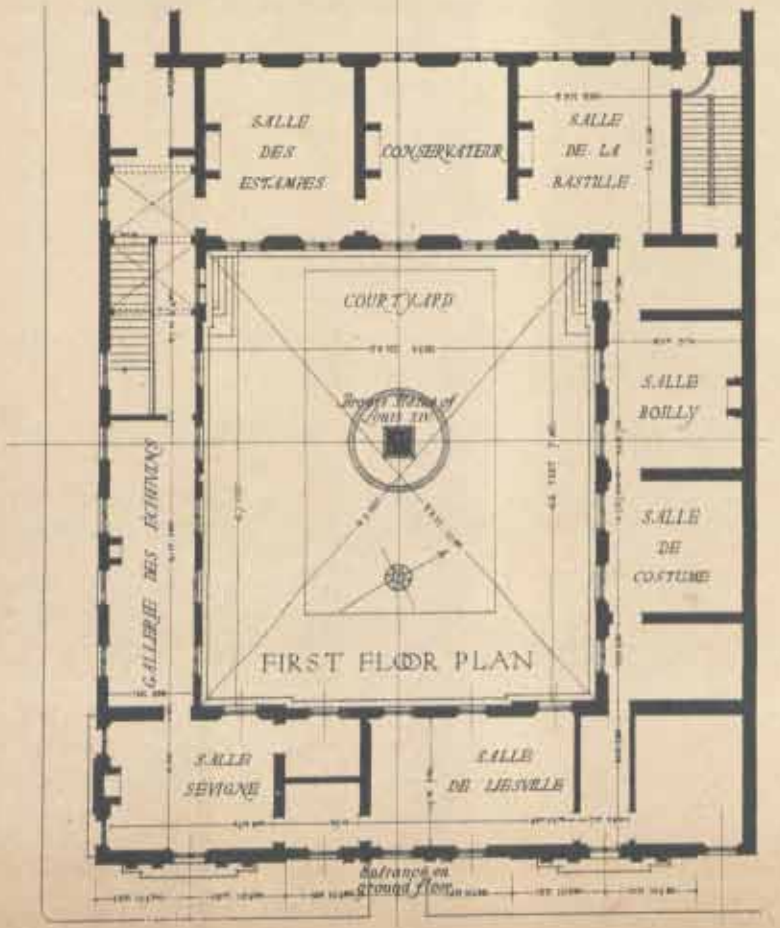
HOTEL CARNAVALET. PARIS



EAST ELEVATION



LONGITUDINAL SECTION

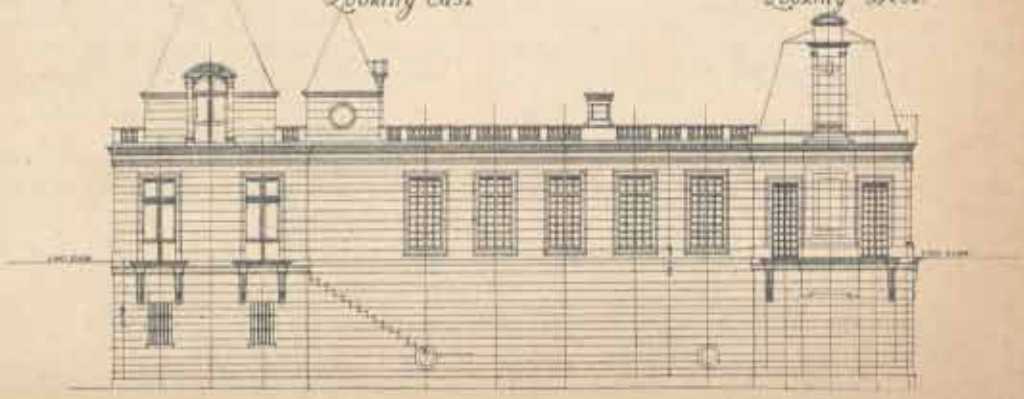


FIRST FLOOR PLAN



SECTION THROUGH COURT
Looking East

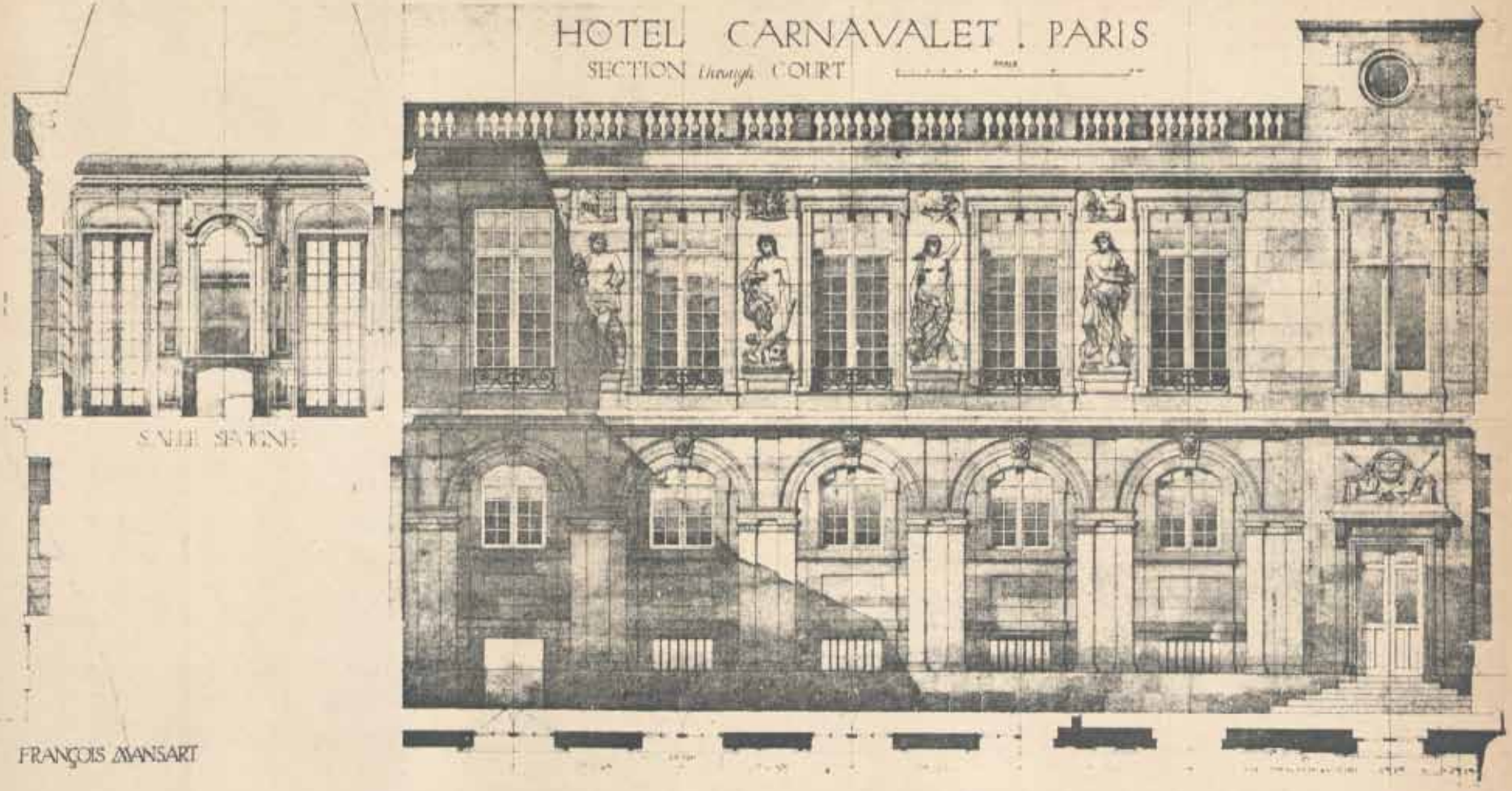
SECTION THROUGH COURT
Looking West



SOUTH ELEVATION FRANÇOIS MANSART

R.I.B.A PRIZES AND STUDENTSHIPS 1910.

FROM MEASURED DRAWINGS SUBMITTED BY MR. CYRIL A. FAREY, AWARDED CERTIFICATE OF HON. MENTION AND FIVE GUINEAS.

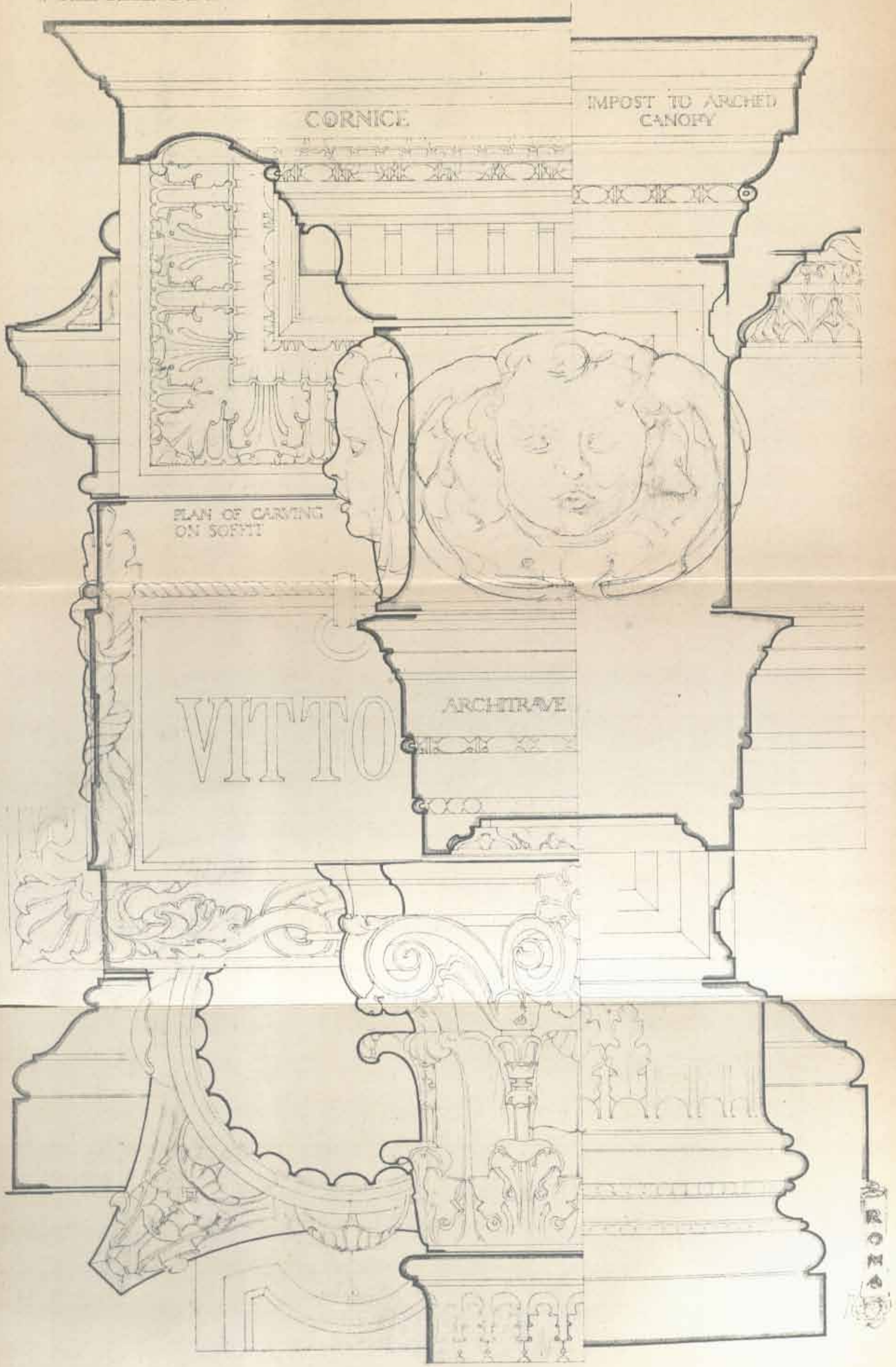


R.I.B.A. PRIZES AND STUDENTSHIPS 1910.

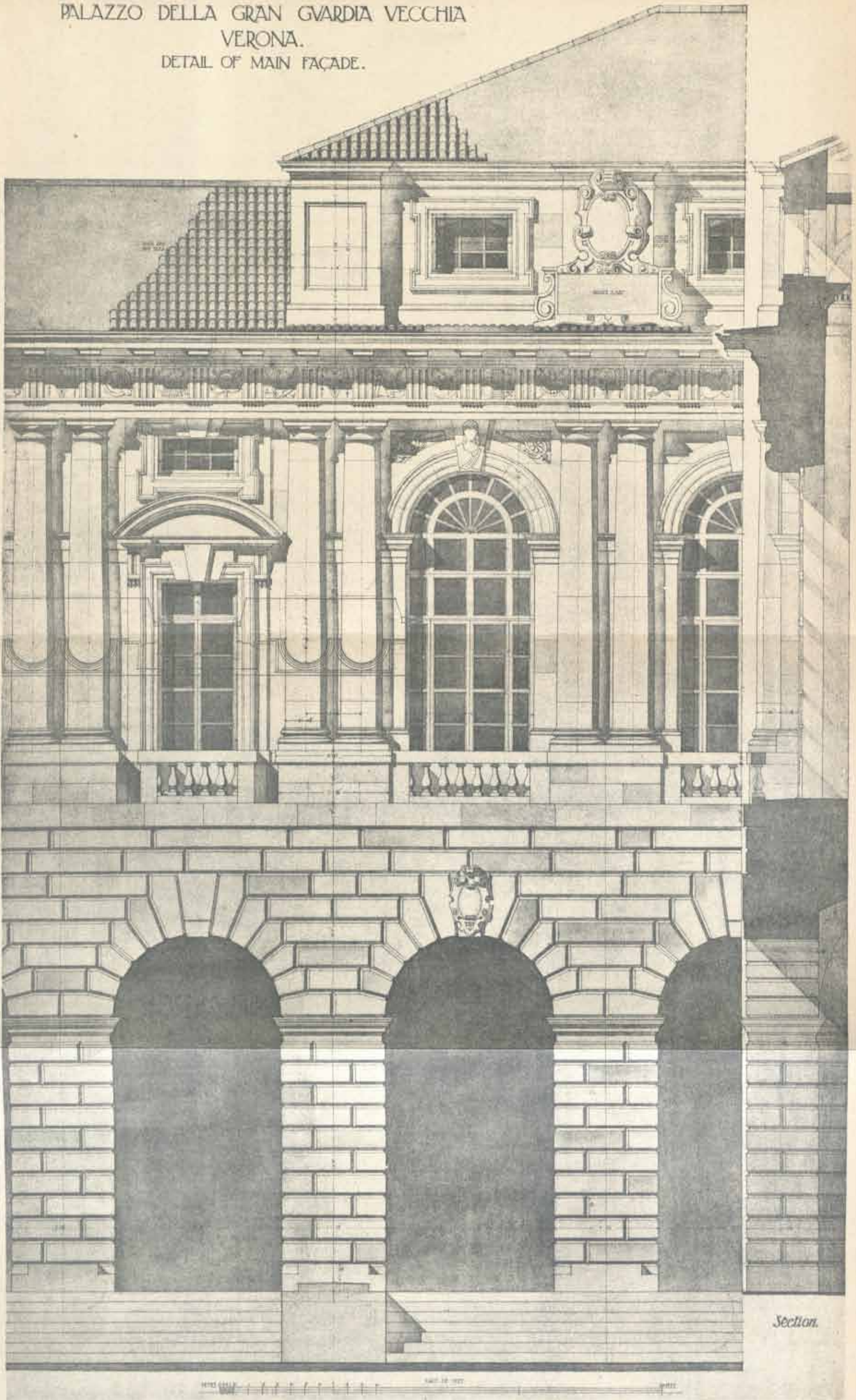
From Measured Drawings submitted by Mr. Cyril A. Farey, awarded Certificate of Hon. Mention and Five Guineas.

THE WELLINGTON MONUMENT.

FULL-SIZE DETAILS OF CORINTHIAN ORDER & MARBLE PODIUM.



PALAZZO DELLA GRAN GVARDIA VECCHIA
VERONA.
DETAIL OF MAIN FAÇADE.



R.I.B.A. PRIZES AND STUDENTSHIPS 1910.
MEASURED DRAWING BY HERBERT J. ROWSE ("ADIGE"), AWARDED
CERTIFICATE OF HON. MENTION.

ment," Roma." The details are beautifully drawn, but the half-inch drawings are less attractive. They lack crispness and decision, but on the whole they make a useful set—although below the average of other years. The drawings placed second, " François Mansart," are remarkably good. The subject is the Hôtel Carnavalet, Paris, and if the large-scale drawings had been up to the standard of the small drawings it would have come into more serious competition with the winner. " Adige " was placed third, with drawings of the Palazzo Pompeii and Palazzo della Gran Guardia Vecchia, Verona, but his execution lacked crispness and did not rise to his high theme.

Two sets of the West Front of St. Paul's were submitted, both conscientiously drawn. Those by " Puggins " are extremely accurate, and I would impress on students the necessity for absolute correctness. Another set shows Christ Church, Spitalfields—a rather gaunt-looking subject when shown in grim outline of black and white. This last competitor would be well advised to consult the conditions more closely in future. He will find that six strainers are required, and if his drawings had been adjudged the best he would have been placed *hors concours*.

The next prize on the list—the Soane Medallion—is the most important, and although the subject of the competition was an inspiring one, it has not called forth any great merit. The fault lies to some extent in the conditions themselves, as perhaps the boundary of the site was too confined. However, the first two designs are good. The first, " Mirth," is a good sober study of Renaissance work, very well worked out, but indifferently drawn ; a serious omission in the plan is the absence of a foyer. The perspective, however, does justice to the design ; indeed, it is quite the best in the exhibition. The second, " Horseshoe," is an extremely clever design, but I fear in execution its crowning feature would be lost. Its clever perspective has been mentioned above. " Sunlight and Air " submits a design worked out with a French flavour. The effect in perspective is not quite happy. An imaginative study, cleverly rendered, is drawn by " L'Espoir." " Mafie's " drawings are extremely interesting, but the design fails as a whole. If it is allowed, I should recommend the author of " Budget " to retire quietly into political life.

Three sets of drawings were submitted for the Owen Jones Studentship, and the prize is awarded to Mr. W. O. Miller, whose work deserves great admiration, but it is regrettable that he did not choose a better illustration of modern work than the façade of the Church of SS. Pudens and Pudentiana at Rome, the front of which has been covered with modern fresco decoration in imitation of mosaic. I endorse the recommendation that the sets of strainers submitted by Mr. H. R. Wilkinson should have some award. Mr. Gibbons should be commended for the most painstaking and careful drawing he has made of the Italian mosaic pavement from the Presbytery of Westminster Abbey, especially as the whole was drawn and coloured on the spot.

The drawings submitted for the Pugin Prize are on the whole very good. Mr. Hubert Frazer, who is awarded the prize, has an excellent variety of drawings clearly and well done. The two gentlemen, Messrs. Chisholm and Cowper, bracketed for second place have also done good work.

Thirteen competitors submitted designs for the Tite Prize. There seems to have been some misconception in their minds as to the kind of loggie best suited to the site. Here, again, if we may say so, the conditions were faulty. One has only to consider the size of the sunk garden—actually about one tenth of the area of Lincoln's Inn Fields—to see this. In spite of this confined area the bulk of the competitors choose to shut it in with raised loggie, which in reality would have a poor crowded effect. None of the designs was considered to possess sufficient merit to warrant the prize being awarded, and it is therefore withheld. The most meritorious scheme, " Jupiter," offers no obstruction. The sunk space (it cannot be called a garden) is surrounded by a terrace raised a little above the level of the street, and the corners are marked by raised shelters—quite a needless addition. His drawing is only fairly good, and his perspective is bad. " Tomahawk," placed second, has no obstruction opposite the palace, although he has surrounded the other three sides with screens. The triumphal arches at the sides are too heavy and quite out of place.

"Comprized Within" is placed third, with a rather careless set of drawings. The perspective is the best of them. Most of these drawings are very much below the usual standard of the work in this competition.

Mr. C. D. Carus-Wilson is awarded the Arthur Cates Prize for some excellent drawings. His design for a country house is also good, at least as far as the exterior is concerned; the plan is poor. Mr. Wm. Dean is commended for his drawings of the staircase of Cromwell House, which are extremely vigorous and crisp.

The Grissell Gold Medal is awarded to "Fra Angelico" for a fairly good study of a church in ferro-concrete. His competitor is commended for his constructive ability. The architecture is of a nondescript and futile character, and the perspective distinctly poor. Mr. W. Milburn, junior, has been awarded the Godwin Bursary in view of the convincing nature of his essay and knowledge of hospital work.

In conclusion I should like to say one word more to students. I have said above that the task of the judges is made extremely difficult by the fact that the drawings are finished in every conceivable style—shadows projected on plan till the scheme is hidden, others coloured like a kaleidoscope, and elevations treated in a hundred different and confusing ways. I should recommend students to alter all this and to finish their drawings simply in pen and ink, and to figure titles, names of rooms, &c., in legible and fair Roman lettering. I hope to see this embodied as a definite requirement in the instructions to competitors in the future. When a perspective is required it is obviously useless to project shadows on elevation. Do not imagine that it is easy to make a fine set of drawings in pen and ink—far from it; but it is by far the clearest and best way of exposing a design.

VOTE OF THANKS.

MR. REGINALD BLOMFIELD, A.R.A. [*F.*]: Ladies and Gentlemen,—It has fallen to my unworthy self to propose a vote of thanks to the President and to Mr. Macartney for the admirable Addresses to which they have treated us to-night, and I rise to do so with real pleasure. As to the President's Address I hope every student will read it and re-read it. It is so direct and sincere, so shrewd in its advice, and so kindly and sympathetic with all the troubles and anxieties which beset young architects, and have beset us older men at the outset of our career, that I think every student ought to take it as a sort of Pilgrim's Scrip to which he can refer for help and encouragement whenever he gets stuck up in the arduous way of his life. I listened very intently to the President's Address, and I thought possibly I might find something to go for. But I could not find a single thing. When the President was expressing his own views I felt in absolute sympathy with every word he said. The only point to which I could take exception is his quotations from two very distinguished men, Sir William Richmond and Mr. Rudyard Kipling, on the subject of sport. I have the profoundest admiration for the genius of both those gentlemen, but I do not think—I may be entirely wrong—that they ever entered very seriously for the great school of English sport. Speaking as an Englishman—I do it with all diffidence, but at the same time as an Englishman I stick to it—I think their animadversions are a hundred miles wide of the mark. I also think they proceed from misapprehension of some of the finest qualities of the English race. We here in our calling think too much of the professional man. Now a man does not cease to be a citizen and a gentleman when he becomes an architect. A gentleman should be a gentleman at all points; and I think it would be a very disastrous thing for this country if Englishmen ceased to be men of their hands as well as of their hearts and their heads. That, as you will recollect, was the old Greek ideal, and I do not think we can afford nowadays to lose sight of that splendid ideal of human life. You, Sir, handled it with that reasonable humanity that we have learned to look for from you, and I think I am expressing the sentiments of all of us here when I say how much we appreciated your Paper. I hope, too, that I may be permitted to offer you, on behalf of all of us here, our very sincere congratulations on your recent honours. I have also to propose a vote of thanks to my old friend Mr. Mervyn Macartney. I have listened with the greatest interest to his criticisms, and particularly to his introductory remarks. Mr. Macartney, as you all know, is a man of fine natural taste developed by intimate study of English architecture, and he has also first-hand opportunities of studying in St. Paul's the noblest

monument of the Renaissance certainly in this country, and probably in the world. If Mr. Macartney does not know what is what in this matter, I do not know who does: he ought to. But I must say, when I listened to what he said, I felt with him that the judges must have had considerable difficulty this year, and for two or three reasons, which Mr. Macartney has touched upon. The first point is undoubtedly the conditions set for certain of the prizes. I have been trying to find out this evening what the precise intention of the Soane Prize and the Tite Prize is. I have been consulting the *Kalendar*, and I cannot find out exactly, but I feel sure that we should all of us agree in thinking that those two prizes are intended to encourage design in what is called the "grand manner"—that is to say, large monumental design. I think the gentlemen who framed the conditions of the competition this time did not quite take account of that, and I think they unduly limited the dimensions; they have not given quite sufficient elbow-room to the designers. The second point Mr. Macartney touched upon was the question of draughtsmanship; he pointed out that some people drew in one way and some in another. That is perfectly true. It is one of the faults of our methods in England, and points to the necessity of establishing some comprehensive and advanced school of design in which those methods would be standardised. That is not the same thing as standardising design; it is standardising the data of design, which is a very different thing, especially when our drawing is our language. I think the sooner we arrive at some definite understanding on these matters, the better for architecture. Mr. Macartney referred to the French designs and methods, and I think it would be a most valuable thing in this country if we could establish some advanced school of design on the lines of the great French school. The last point, in which I do not quite agree with him, is that he did not consider the students' designs this year quite up to the average. I have had a struggle with those designs at the Alpine Club, and it seemed to me that they were well up to the standard; in fact, I was surprised at the quantity of excellent work shown there. It seems to me that the difficulty of the judges must have been not so much from the want of good work as from the quantity of it that was shown. My own view on all these things is that there are just as good fish in the sea as ever came out of it, and I always look at the *proxime accessits*, the "honourable mentions," and see what they have done; and when I thought of what I saw in the Alpine Club Galleries the other day, I only wished that the Institute could extend its prizes and multiply its awards. I should like to have seen those prizes extended up to the hilt, and made fully equal to the winners. Mr. Berrington, for example, for his massive and dignified design. Then, too, there was the design that Mr. Macartney referred to, "Mafie," which was a very attractive bit of penmanship, and a remarkable design. And so with the Pugin Studentship—some admirable work was submitted by Mr. Cowper and Mr. Chisholm, both of whom I am glad to see did receive supplementary prizes. I can only congratulate these *proxime accessits* as well as the winners, and I am sure, as good sportsmen, they will take the award in good spirit, and feel that everything has gone right in this matter. I think to all of us it must be a matter of great satisfaction to find this promise of ability in the younger generation. Looking round the Alpine Club Gallery, and also at the designs submitted for the Gold Medal of the Academy last session, I felt that some of us older men would be very hard put to it to do anything of the sort; but, on the other hand, we old men, or moderately middle-aged men, at any rate have a certain amount of experience, and as the result of that experience one would like to offer one's humble advice. It seems to me that the danger of the young men is the learning of the fashionable catchword in design; you see the same thing repeating itself year after year, I was going to say month after month. For the last two or three years we have had an epidemic of the most abominable Ionic capitals. I see it in nearly every classic design; in my experience, when I have had to look after them, there is always a swag hung across the top with groups of fruit and flowers coming down from the volute. We all know where that is taken from—I will not say from modern French work, because you find it in old French work, but when it appears time after time in every classic design it simply becomes nauseating. The thing may be passable in its place and time, but not on every possible occasion. And it is also to be considered that the French at this moment do not consider themselves any better off in the arts than we do. I have been reading certain French critics, and two very eminent critics I have been reading say that the arts in France, and particularly architecture, are bankrupt. That is a very large order; I do not say that it is true, but no doubt there is something in it, and I do not think it is for us to go and borrow from people who are distinctly shaky in their faith in themselves, and borrowing is in any case the merest short cut possible that you can take. The only way to form a manner of your own is to saturate yourself with old work and to study it incessantly; and if we are to study French work do not let us study French work of the twentieth century, but of the seventeenth or eighteenth and the periods of acknowledged masters. That is the only way in which we shall ever form a right and reasonable manner of our own. I think that the two pitfalls that lie in wait for the young student are this neglect of tradition and exuberance of ornament, as an old Dean of Christ Church used to

say, that *Cœlatura nimia*, that exuberance of ornament which suffocates beauty. This sort of idea that ornament and detail is the whole of architecture is one of the most abominable fallacies. I think it is now fairly exploded, and that architects, young and old, are doing all they can to get out of it, and to rely on their brains and imagination rather than on photographs and sketch books; but it is for you young men to keep up this effort and to see that it does not fail. You have, as the President has told us, the priceless gift of enthusiasm, and if you can only keep it bright and untarnished you will win not only success as artists, but, what is infinitely more important, that enjoyment of your work without which no great art can ever flourish.

Sir WM. RICHMOND, K.C.B., R.A. [*H.A.*]: Mr. President, before I say anything, will you allow me to congratulate the Royal Academy upon your election as a member of that institution? Will you allow me also to say that I hope the time will come when we shall have more architects in that institution? And may I remind you, gentlemen, that I had the honour of receiving the Silver Medal from the Royal Academy when your President received the Gold one so many years ago that I do not like to think of it? And may I congratulate also the author of *The Mistress Art* upon his eloquent speech—just perhaps a little bit too Palladian for me? I have read his delightful book, full of charm, full of scholarship, and he knows as well as I do that there are points upon which we do not agree. But this is not an occasion for going for disagreements, but rather for points of agreement, and I entirely agree with the strictures he made upon the remarks that I am supposed to have made about games. I believe in games. You may not think it—I am an old man, but I once was a devil at games—and perhaps, because that is so, I see their danger. Now I would very much rather see our youth occupied in making a Territorial Army or in being Scouts than playing a useless game like football. There is a tremendous amount of wasted energy in such games. That I know for a fact. I can remember the days when I rowed, pulled, hunted, and did all those things with an avidity so terrific that I had no energy left for my work, and it is only for that reason that I warn you of excess. I do not say that games are not desirable things, but I do think and maintain my position that when in the newspapers you see four columns entirely appropriated to nothing in the world but these games, these passing amusements, that is damaging the intellectual efficiency of this country. To-morrow we shall see probably in the newspapers a little paragraph about the interesting and vital question which touches the mental cultivation of this country, the building up of an intellectual race; whereas, on the other hand, you will find perhaps four columns about cricket in Australia (or somewhere) and football. I think that is a sign of the decadence of this country, and I stick to it. Your President has delivered to you such a charming Address, so full of matter that he has embraced, as it seems to me, the whole question from beginning to end, and I am thankful to say has left me nothing to say; and the Address you have had from Mr. Macartney is also as full of meat as an egg. I have been preaching exactly the same doctrine at the Royal Academy: I only hope my addresses were as good as these we have just heard. The bother is that you cannot get the young chaps to catch on—they will not; they put cotton-wool in their ears after having listened to a little—to that part of it which they think suits them—and the rest they put in their pockets and smoke with their cigarettes. But to be quite serious. I do think there is one thing I might suggest. I was looking round these walls just now for something to give me a cue, but I am told that those designs are the work of last year's students. I should like to see the designs of this year round the room, and not at the Alpine Club, in another building altogether. When we are talking about art, it would be so interesting if we had the designs of the young students round the walls, and then we could go and have a look at them; and I, being possessed of a somewhat critical faculty, might have scolded you or praised you. I have nothing to add to what your President has told you, but there is one little point, and that is as to what he said about the colouring of the Greek architecture. There is not the slightest doubt that it was coloured—that we all know; but you should not for a moment think that it was coloured in the gaudy colours such as some might apply now—especially the Germans—that is to say, opaque oil colours mixed up with excellent varnish and enduring and lasting materials, alas. It was not that at all. The walls were covered with wax first of all, even the outside columns, so that they could receive delicate colours, and I believe if the most rigid anti-colourist could visit the Parthenon now, either outside or inside, he would see the place covered with what looks very much like spring flowers, and even paler than that. It was not aggressive; the Greeks were far too great lovers of form to obliterate it by colour. I have seen buildings in Sicily which still retain the ancient colour dating two centuries B.C., it is the most exquisitely delicate thing you can conceive—it just scintillates. There was no blue at all used, but only black and white, and that looked blue in that climate. The difficulty we have to contend with in this climate, as the President has said, is the question of light. Here, if colour is to be visible, it has to be crude at first, and therefore I think an undue prejudice has been established by the sort of coloured architecture we have seen in this country. But look back a little bit: look at colour used by the Gothic decorators, say at Winchester or Norwich—that is

not crude. At Winchester, on the vault of the Angel Choir there are only four ochres, and black and white was the blue, these simple tones making a delightful harmony. Of course, if you daub a lot of violent colour on a building you vulgarise it; but I do maintain that architecture, however pure, however exquisite in treatment and refined in carving and design, is not injured but may be enormously improved by judicious colouring.

THE TEACHING OF ARCHITECTURE.*

By J. L. Ball,

Director of the Birmingham Municipal School of Architecture.

SOME excuse is perhaps needed for introducing the highly technical subject of architectural education to an audience which represents several of the other arts. The excuse may easily be found, partly in the general interest of æsthetic training, and partly in the special concern which all the arts have in a strong and living school of architecture. It would be absurd, of course, to claim for architecture a primacy in the republic of art. But the very powerful influence which it has always exercised is beyond dispute, and is one of the most remarkable and important facts in the history of that republic. The reason for this influence, its precise nature, and its limitations, might perhaps be explained without much difficulty. But the explanation, interesting as it is, would occupy far too much of our time on this occasion. It is enough to say that the force of dominant architectural conceptions has been profoundly felt in the whole range of the plastic arts, from the least considerable craft up to the greatest sculpture and painting. Nay, even poetry, an art entirely intellectual, and which addresses even its imagery to the senses through the intellect, has been affected by architectonic influences. The *Divine Comedy* and *Paradise Lost* may be mentioned as instances which are familiar to everybody. On the other hand, in periods when architecture is poor or weak, or in countries where it hardly exists, the other arts seem not infrequently to betray a want of energy, an infirmity of purpose, a contentment with trivialities, an insensibility to the higher elements of grandeur and sublimity. The art of Japan furnishes a striking illustration of this. Exquisite and admirable as that art undoubtedly is, we are nevertheless conscious that some essential element is wanting to it, something which we are accustomed to find in European art even of a much inferior grade. The reason probably is that Japan has no architecture of any importance. The qualities which we miss in Japanese art are precisely those which result from a strong architectonic sentiment, from the pressure of a dominant architectural idea. The truth would appear to be that architectural conceptions when widely diffused tend to create an imaginative *condition*, or mood, as subtle and indefinable as an atmosphere, which if not strictly necessary to the other arts is at least very favourable to their healthy and vigorous growth. Some brief reflections therefore on the method of teaching this art may be acceptable even to those who are not actually engaged in its pursuit.

It is no secret that all who are interested in architecture as a fine art have long felt a grave anxiety about the education of architects. The old relation of master and pupil, admirable in theory, and successful enough under favourable circumstances, has broken down under the changed conditions of modern life. There is no need to enlarge upon this fact; it is generally recognised that the present state of things is most unsatisfactory, and tends to become worse and worse. The Royal Institute Board of Education proposes therefore to substitute for the old premiated pupilage, at its best a somewhat casual and haphazard arrangement, a systematic course of training in an architectural School. This will occupy the whole time of the student for a term of two years. Only after this preliminary course of training will he enter upon his duties in an architect's office, still devoting part of his time, but a part only, to work in the School. Two or perhaps three more years will be passed in this manner. Thus, after a full course of four or five years spent in a comprehensive and well-regulated course of study the student may expect with some confidence to be in a fair way of attaining a real mastery of his art. Such in very sketchy outline is the method of teaching architecture which is now advocated in place of articled pupilage. Schools of architecture for teaching purposes have been in full operation for some years in London and in Liverpool with excellent results. Edinburgh has more recently followed the example. Our own city, thanks to the munificent and far-sighted policy of the School of Art Committee, and the assistance of the University, now possesses a well-equipped day-School of architecture. Architecture indeed has

* Lecture delivered to the Midland Arts Club.

always been included among the subjects taught in the School of Art. Evening classes have been established in order to supplement in some degree the inadequacy of office teaching. But attendance at these classes has been voluntary, and only the most eager and enthusiastic student can derive profit from work done after the duties of the day. The most serious defect of all such schemes is the want of system and of a properly arranged course of study. It is painful to reflect upon the mental confusion, the dissipated energy, which must inevitably result from casual efforts. There is very good reason to believe that the action of the School of Art Committee in instituting a real day-School of architecture will prove as wise as it is generous, and that the influence of the new School will be felt in time throughout the whole range of those craft arts for which the Birmingham School of Art is already becoming famous. This is not the place to enumerate all the advantages which the new system offers in comparison with the old, but it may be permissible to mention four of the most important.

First: the course of study in the School is systematic, co-ordinated, and consecutive; instead of being, even at the best, casual, haphazard, and unrelated. The attention of the student is directed from the first to the mastery of homogeneous principles, to some one of which he can refer every fact as it comes before him. Under the old methods he was often unable to distinguish any clearly defined principle among the formidable mass of heterogeneous facts by which he was encumbered. How great a difference is made to the mental attitude of a student by the orderly and scientific presentation of a subject is too well known and too generally recognised to need any comment.

Secondly: a preliminary course of study interposes a valuable novitiate between the vague early fancies of youth and the final choice of architecture as the work of a life. It is a period of probation, a test of special aptitude. At a critical epoch it affords time for reflection, for self-examination, perhaps for the revision of preconceived or hastily adopted notions. The minds of young people at the age of sixteen or even of seventeen are often singularly immature. The considerations which determine their choice of a career would no doubt seem ludicrous to us if the results were not sometimes so deplorable. Under the old system when the articles had been signed and the premium paid it was seldom possible to turn back. The die was cast. The decision was made. However unsuitable the choice, it was irrevocable. However distasteful the work proved to be, it must be persevered with. Even if after the expiry of his articles the student determined to devote himself to some other occupation the partial and ill-assorted knowledge which he had managed to pick up was little likely to be of any service to him. Four or five years of his life had in fact been wasted. Under the new system, however, if a young man should find that he has made a mistake no great harm has been done. If he should discover on a closer acquaintance that architecture is not quite what he had imagined it to be, that his work is irksome, and that his tastes and aptitudes really lead him in some other direction, to building perhaps, or to one of the craft arts, there is no serious difficulty in making the change. His time will not have been wasted. His studies and the knowledge which he has acquired will probably be of the utmost value to him. Indeed it is hoped that the time will come when many of those who intend to become builders, or to follow some other branch of craft art, will perceive the value of a preliminary training in architecture.

The third advantage which the new system offers over the old is the practical study of the more important building crafts. Classes in carpentry and masonry in which the student with his own hands frames the timber and chisels the stone and mixes the mortar will give him a familiarity, an intimacy, with building which can never be gained from the study of text-books. It is not to be expected of course that he will attain any real degree of technical skill in the building crafts, each of which demands a separate apprenticeship. But he will have learnt something about them. He will understand something of their difficulties. He will be able to appreciate fine work when he sees it. Above all he will learn what the office-trained pupil can never learn, that architecture is very largely an affair of materials, of craftsmanship, of traditional and familiar habitudes; that it has to do with mass and solidity and weight. He will avoid the vulgar error of looking at his art as an exercise in drawing lines on paper. He will form the just and necessary habit of thinking of masses of material and not of mere draughtsmanship. To some of us this first effort to regain for architecture its lost intimacy with technical building may well seem of most hopeful augury.

And, fourthly, it is by no means the least important advantage of the School course that it teaches architecture solely as an art, and not as a business. The object of the School of Art Committee is not to educate business men but to foster a great art. The business of an architect can be learnt very easily in an architect's office. When the time comes for the student to enter an office he will be afforded ample opportunity of making himself familiar with the business. Meanwhile let architecture be presented to his fresh and impressionable mind as a grave and majestic art, free from all sordid associations, free even from the inevitable responsibilities of practice. First impressions are notoriously vivid and permanent. The influence on character of high and enthusiastic ideas cannot be over-estimated.

Such then are some of the more striking advantages which the new method of teaching architecture presents. It will be admitted that

they are important advantages, and that we may look forward with some confidence to the future of an art which has suffered in the past by having been left to casual instruction. Let us next consider very briefly the course of study which is to be carried on in the School. What methods shall we employ for the teaching of architecture?

In beginning the study of architecture the student is apt to be bewildered by a multiplicity of details all of which claim his attention at the same moment. The whole looks a disordered tangle through which he can perceive no distinct path. He is plunged into the middle of his subject before he quite knows what it means. Not only are there many diverse things to be learnt, but all are so closely related that it seems impossible to learn one part without some knowledge of the others. This is no doubt true of most arts. But it is specially and peculiarly true of architecture, an art which is half a science, which is mathematics on the one side and on the other side an expression of ideas by abstract form, which is based on the common and secular practicalities of life and yet soars far above these to the region of pure and ideal art, the spire of Strassburg, the dome of the Holy Wisdom. It is not surprising therefore that the novice in architecture should experience a certain mental confusion, and the first necessity is to provide him with some kind of map or outline of his studies. These may be conveniently divided into three groups, closely related and concurrent, each important and necessary, though perhaps not equally important.

First: the study of the nature and proper uses of the materials of building.

Second: the study of the various methods of construction and especially of the dynamic *principles* of structure.

Third: Design, which, at least in its elementary stages, may be defined as the application of materials and structure to the noblest use.

First then of materials. It surely needs no elaborate argument to show that an architect ought to possess a very close, intimate, and comprehensive knowledge of the materials which he is to use in his buildings. A doctor who should be ignorant of the nature of the drugs with which he compounds his pills and draughts, an engineer who should have no first-hand knowledge of the metals he proposes for his engines, would be proper objects of ridicule. A thorough knowledge of his materials is just as necessary for the architect. In every art it is essential first of all to master the material, the vehicle, in which that art finds expression. There is no such thing as abstract design. Design is always an expression in some material. All the arts, sculpture, painting, the minor crafts, are various expressions of intellectual energy through the medium of materials. But to no art is a knowledge of materials more necessary than to architecture. It is the art of using the materials of building to the best advantage, of making noble and enduring works of those materials. How shall the architect undertake the direction of building, how shall he discharge his duty to his patrons, nay, how shall he even design, without a precise knowledge of materials? It is with materials, the commonplace materials of building, that the architect has to mould forms of impressive beauty. Even so the poet, master of words, and sensitive to their faintest, their most recondite associations, weaves out of the common language of the market-place and of the fireside his "mystic unfathomable song."

Again, all materials are not equally good, that is, are not equally suitable to the architectural purpose. Goodness of material, resistance to pressure, resistance to decay, convenience, and the like qualities, fulfil the needs of good building, of good engineering. But for architecture there is required in addition to these qualities an architectural fitness. Of two materials equally durable one will be better fitted than the other for the purpose of purely architectural expression. We may say in general terms that the important quality of *colour* in architecture is dependent upon the choice of materials. It is necessary perhaps to discriminate here between two different methods of obtaining colour in architecture. Buildings may be coloured by handing them over to the painter, to the glass painter, to the artist in mosaic. The result is not strictly speaking *architectural* colour. It belongs to other arts. That only is true architectural colour which is the result of the architectural use of materials chosen for the special purpose. We have seen that it is the faculty of architecture to use materials to the best advantage. Let us take an example. How then shall we use coloured or veined marbles to the best advantage? Obviously in plain surfaces cut and polished in such a way as to exhibit the full beauty of veining and colour. In this manner we find marbles used, with splendid effect, in the mediæval architecture of Italy. Marble was also used occasionally, perhaps more often than is generally thought, in English mediæval architecture. But it was not used as in Italy to display the charm of pure colour. It was used in precisely the same way and cut and carved into precisely the same forms as the common limestones and sandstones. The few instances to the contrary only give emphasis to the rule. In the use of marble therefore the English architects of the middle ages must be pronounced inferior to their Italian contemporaries. Nor would the importance of this fact be at all diminished even if it were to be shown, as it probably might be, that in other respects the English architecture is superior to the Italian. There could hardly be a more significant instance of the value of that knowledge of materials of which we have been speaking.

Let us pass on to the second group of studies necessary in the teaching of architecture, namely, methods of construction and the dynamic principles

of structure. That an architect must possess a very thorough knowledge of the way in which buildings are constructed is a truth so obvious as to amount to a truism. Unfortunately like many other obvious truths it is not always sufficiently recognised in practice. Architecture is a constructional art. It is structure expressed, idealised, raised to the level of art. The exhibition, the emphasis of noble structure is always pleasing in architecture as it is in representations of animals and plants. The vulgar conception of architecture as a veneer of ornament unrelated to the real facts of construction is an ignoble error. Neither is architecture any conceivable mixture of construction and ornament regarded as separate things. Finely realised and finely expressed structure is identical with architecture. Design in architecture is an intense sensibility to the dynamic principles of structure. All really great and expressive architecture imposes on us a sense of nervous and vital strength, of power self-contained, reposeful, and accurately proportioned to the counteracting forces. Indeed it may be said without much exaggeration that the expression of power and energy by means of structure is the peculiar glory of architecture. Certainly no other art can exhibit on the same scale the action and counter-action of gigantic forces; such as we see for example in the great French cathedrals.

The actual construction of buildings is a much less complex study than a beginner is apt to imagine. The great building crafts are two only, Masonry, in which is included all kinds of wall building; and Carpentry, with which in the present day must be associated the structural use of steel. These are the two essentially *constructive* crafts; the other crafts which take part in building, if constructive at all, are so in a much inferior degree. Further, the really important and indispensable principles of construction are of an antiquity so remote that all record of their origin has been lost. The number of these fundamental principles is not great, but they are capable of an infinite variety of applications. It is to the mastery of these fundamental principles therefore that the student must principally direct his attention. He must not merely know but must intimately feel what structure in building means, what weight means, what stress means, what the forces are, of gravitation or storm, which structure has to meet and counteract. All building is an interference with, a resistance to, the forces of Nature. Force and resistance to force, such in brief is the architectural conception of structure.

Thirdly, of Design. The third branch into which the general teaching of architecture may be divided is for many reasons the most important. The studies which we have been considering, the nature of materials, the nature of construction, are studies which have an ulterior object. Their final object, their supreme purpose, is to serve in the production of works of imaginative art. Such studies, if they are not closely associated with design, will carry the student only so far as building, or what is rather absurdly called engineering. Builders and engineers are perfectly well acquainted with these subjects. Do we find their works satisfactory? On the contrary, it will be admitted that they are uncomely, prosaic, and uninteresting. Materials, however strong and enduring, construction, however scientific, do not, of themselves alone, constitute architecture. Architecture is a fine art, and like the other fine arts it is distinguished by a profound idealism. It is an intellectual or emotional *modus* superadded to the economic *modus* of building.

There is a phrase "reason in building" which is the favourite catchword of the moment with a certain class of persons fond of oracular utterances. Reason in building! Does anyone question the very obvious truth that reason is needed for building? We cannot surely have too much reason in building or indeed in anything. But the reason required for building is the Practical Reason, and the reason required for architecture is the Imaginative Reason. We are not of course to regard the names given to various forms of mental energy as indicating different powers, but different exercises of the same power. The Practical Reason is reason under one mode or attribute, and the Imaginative Reason is reason under another mode or attribute. When we compare the action of the Practical Reason with the action of the Imaginative Reason we are at once reminded of Kant's celebrated distinction between analytic and synthetic judgments. The action of the Practical Reason is analytic; of the Imaginative Reason the action is synthetic.

It is by the Imaginative Reason then that building is transfigured into architecture; the Imaginative Reason, using materials and structure not for themselves alone but to express ideas. Architecture like every art is a distinct form of intellectual energy or force. In the great periods of architecture we see the Imaginative Reason taking up the prosaic details of building, the trivial furnitures of life, and transforming them into the scenery of a fairy tale. The mediæval architects for example seized upon this or that necessity of practical building and in a mood of half-melancholy half-playful exaggeration swept it instantly out of the region of the commonplace into the land of romance. Great architecture is not a nicely calculated adaptation of means to economic ends. It is essentially the outcome of a state of mind, of an exalted or enthusiastic temper.

It would seem to follow from this that architectural design cannot be taught. No art, it may be said, can be taught as geometry or the way of building a wall can be taught. What is needed for it is a certain mood of exaltation, a certain mental attitude, which is wholly subjective, and which the student must for the most part cultivate

for himself. This is no doubt quite true. But if architecture cannot be *directly* taught it can be taught *indirectly*, by the influence of example. The divine spark can be communicated in this way only, by the contagion of noble examples. The student may indeed do much for himself. He may fill his mind with graceful and elevating images. He may make himself familiar with all that is best in Literature and Art. He may waste no energy on the trivialities of sport, the turning of a wheel, the insanity of flying machines. Nevertheless, it is certain that the faculty of design can be kindled in him by one influence only, namely, by direct contact with the best architecture of past ages and of the modern period. There is no other way. The systematic study of all ancient and modern schools is the essential foundation for the teaching of architecture. The future must grow out of the past. But if the attempt should be made to substitute some *a priori* method for the historical, if the student should be expected to evolve a new architecture from the planing of boards or the chipping of stones, a vulgar and prosaic utilitarianism will be the issue. It may be said with much truth that the historical study of architecture has hitherto produced only unsatisfactory results, that it has fostered a pedantic archæology, and that it has often degenerated into mere dull copying of ancient works. But the answer is plain. The errors of modern architecture are to be attributed not to a proper study of ancient examples but to an imperfect and casual and uncritical study. These errors might have been avoided by a more thorough and manly spirit. The only safe attitude for the student towards ancient works of architecture is the critical attitude. The only fruitful method of study is the comparative method. Even in the noblest architecture of past ages the student must learn to discriminate and compare. Nothing that has yet been achieved in this art is too exalted for judgment. No school has a monopoly of excellence, none is faultless. Architecture, like Life itself, is always an aspiration not perfectly attained.

The study of ancient architecture may perhaps seem a vast subject, extending as it does over some fifty centuries. In reality it is not so vast as it appears. The art has never been universally practised; almost all the really important architecture of the world is to be found in Europe and in those parts of Asia and Africa which are closely contiguous to Europe. The nominal boundaries of the Roman Empire would very nearly comprehend it. Yet, even so, what a magnificent heritage it is! Surely it is our duty and our privilege to enter into it and to possess it. Some people talk as though a knowledge of ancient architecture were a thing to be deplored. They profess to regret a golden age of careless ignorance when men knew and practised but one traditional way of architecture. Whether we regret it or not, the old traditional way has gone for ever. Under modern conditions no architect who is ignorant of the works of past ages can hope to excel. Nor is it true that in ancient times architecture invariably followed one fixed traditional course. No greater mistake can be made. A very moderate acquaintance with architectural history affords ample evidence that there have been long periods when the art has been swayed by several independent and conflicting streams of influence. One example will suffice out of many, the example of Sicily. The architecture of Sicily during the middle ages was affected by Greek traditions, by Roman or Italian traditions, by Norman influence, by Byzantine influence, by Saracenic influence. It will not be contended surely that the result in this instance is unsatisfactory. Indeed so far is it from being universally true that the best architecture has resulted from following one unbroken line of tradition that the exact opposite would seem on the whole to be more probable. Is there not at least good reason to suspect that the finest schools of architecture have been the consequence of what may be termed cross-fertilisation, of new and strange forces breaking in upon the languid current of tradition?

Such reflections as these upon so large a subject as the teaching of architecture are of necessity imperfect and cursory. It must not be supposed that any complete view of it can be given within the limits of a single paper. Many questions suggest themselves at this point which must be waived for the present. What is the nature of design in architecture? What kinds of ideas or qualities does the art express? What laws does it illustrate? What is its relation to Nature? To all such questions, important and deeply interesting as they are, no answer can be attempted on this occasion. Nor has any account been taken here of the *purpose* of architecture. Has this art any purpose more profound than those familiar practical purposes which are sufficiently obvious? The final purpose of architecture, as of all the greater arts, the only real justification of their existence, was defined by Aristotle more than two thousand years ago:—*κάθαρσις*, the purification of the soul by inspiring and pathetic images. In modern phrase the ultimate and essential purpose of art is the elevation of the mind above the commonplace and the sordid. "It is a refuge," says Pater, "a sort of cloistral refuge from a certain vulgarity in the actual world." Those who would make of it a trivial amusement for idle people, or a vehicle of ignoble pleasure, are preparing only its degradation and decay.

REVIEWS.

THE MAUSOLEUM AT HALICARNASSUS.

A Restoration of the Mausoleum at Halicarnassus. By J. J. Stevenson, F.S.A. La. 8o. Lond. 1909. *Price* 2s. 6d. [*B. T. Batsford*, 94 *High Holborn.*]

It is not always that restorers display any very scrupulous respect for the data upon which they ostensibly base their labours. The force of preconceived ideas is difficult to overcome, and the sudden discovery of some fact quite inconsistent with the carefully thought out scheme appears to be not infrequently met by an attempt to explain away the discrepancy without any serious consideration of evidence.

The author of this essay has approached his task with the object of arriving at a reconstruction which shall be in accord with the fragments in our possession, embody the facts ascertained during the excavations, and agree with the extant literary notices. Careful comparison of his results with the materials leads to the conclusion that in essential points he is probably nearer the truth than anyone else who has worked at the problem, but the subject still provides opportunity for the putter-together of puzzles.

Stevenson adopts the "small plan" type which had commended itself to Cockerell before the excavations were undertaken, but with variations dictated by subsequently ascertained facts. In this general view he is at variance with the recently expressed opinion of Professor Lethaby, whose reasons for rejecting the small plan type are:

1. That the "discoveries showed" the pyramid to be mainly made up of wide steps.

2. That the small type of monument would have occupied such a small part of the immense foundation.

3. That it would not have given the right proportion of plan to suit a rectangle 108 × 127 feet and to give two bays longer on the flanks than on the front.

4. That it would hardly have been a "gigantic monument."

5. That the small scheme had its origin before the site had been explored.

6. That the Professor thinks such a design would be historically impossible.

Unfortunately, Mr. Stevenson is no longer alive to maintain his own position, so it may perhaps be permissible to suggest some answers that he might have made to the points put forward by Professor Lethaby. Taking them *seriatim* it may be said as to:

1. That even with Stevenson's type of pyramid and meta the greater number of cut stones for the steps might be wide. Further, *is* it beyond dispute that the discoveries showed the steps of the pyramids to be chiefly wide ones? So far as the statements of Newton go, the point would seem to be left open, for only relatively few steps were found; and, if most of them were wide, it was probably due to a combination of sheer accident with the facts that the destroyers of the monument found it easier to remove the smaller stones, and that the smaller stones having been nearest the top of the building were also on top in its ruins and so would naturally be first removed. Newton says "forty to fifty of these steps were found. In all cases but two, the treads measured 1 foot 9 inches and 1 foot 5 inches—of the exceptional two, one had a tread of 9 inches and one of 10½ inches." He does not refer to the whole of the steps found, but only to the chief group on the site. There are also steps of 6-inch and of about 4½-inch treads.

2. As to the area occupied by the upper part of the monument relatively to the foundations, the evidence of the sixteenth-century destroyers is that the part which at the time of their depredation was below ground was of greater area than that above, and Guichard's words make clear that they were not referring to a continuous base of steps all round the monument. He says: "... certaines marches de marbre blanc, qui s'esleuoyent en forme de perron emmy d'un champ pres du port, là où iadis estoit la grande place d'Halycarnasse, ils les firẽt abbattre et prendre pour cest effect. La pierre s'estant rencõtree bonne, fut cause, que ce peu de maçonnerie, qui parroissoit sur terre, ayant esté demoli, ils firent fouiller plus bas en esperance d'en treuuer d'auantage. Ce qui leur succeda fort heureusement: car ils recognurent en peu d'heure, que de tant plus qu'on creusoit profond, d'autant plus s'eslargissoit par le bas la fabrique . . ." This is fairly clear. There were white marble steps in the form of a perron, and *after they had taken away these steps* they dug lower and found that the deeper they went the more the structure was enlarged at the base. It is fairly clear that an ordinary perron only was meant, of the type suggested by Stevenson. A perron "was a flight of steps," as Viollet-le-Duc says, "leading to a platform," &c., or, according to Larousse, "escalier de quelques marches en saillie sur une façade."

3. The substructure of 108 × 127 feet will fit Stevenson's general lines, and there does not appear to be any evidence that the flanks were two bays longer than the fronts. The argument for that disposition of columns is merely that it could be arranged on the actual foundations just as well as could Stevenson's scheme. The large plan has the drawback of requiring us to accept an uneven number of columns upon both front and sides, and also an unusual difference between the numbers. The argument of analogy with usual arrangements in temples must not be pressed too far; but, for whatever it is worth, it favours Stevenson, whose plan gives the nearer approximation to the usual practice. Nevertheless, one arrangement of columns will fit the fixed data as well as the other.

4. If, as Professor Lethaby says, "hanging in void air" is rhetoric for "high," may not admira-

tion for the beauty of the work and its undoubtedly large dimensions, particularly its height, have led to its being called, in similarly rhetorical terms, "a gigantic monument"? And what other Greek tomb was as big?

5. This may be true. Still, the circular theory being hardly worth discussion, there seem to be only two arrangements to choose from, and the risk of a correct guess was therefore at all times considerable.

6. The historic impossibility. If the Professor would develop this argument at length it would almost certainly be instructive. He does not press it far in his existing statement. Do not the stones in the Museum suggest that the marvel must have been the combination of so much beauty and delicacy with so great a size? According to Pliny it was the work of the five sculptors that constituted its claim to rank among the Seven Wonders; by implication we may say that its size was a secondary matter.

The drawing given by Pullan of the Lion Tomb gives an outline very suggestive of Stevenson's meta.

The present writer would submit that even the foregoing reasons alone show that Professor Lethaby's arguments for rejecting the small plan are not absolutely convincing.

It may also be urged against the large scheme that a pyramid of the required height, composed entirely of the large steps, is too flat for the satisfactory display of the group at its top, and that the enormousness of the building with the flat pyramid dwarfs the quadriga into insignificance. These considerations cannot be urged against Cockerell's or Stevenson's scheme.

Some further consideration of Guichard's narrative, particularly as it is somewhat freely rendered in both of the Papers now under discussion, and in the *British Museum Catalogue of Sculptures* (1900), may be worth while. The original is quoted by Newton as follows:—

"Au bout de quatre ou cinq iours, apres auoir faict une grande descouuerte, par une apres disnee ils virent une ouverture comme pour entrer dans une caue—ils prirent de la chandelle, et devalerent dedans, où ils treuuerent vne belle grande salle carree, embellie tout au tour de colonnes de marbre, avec leurs bases, chapiteaux, architraues, frises et cornices grauees et tailles en demy bosse—l'entredeux des colonnes estait reuestu de lastres, listeaux ou plattes bandes de marbre de diuerses couleurs ornees de moulures et sculptures conformes au reste de l'œuure, et rapportés propremẽt sur le fonds blãc de la muraille, où ne se voyait qu'histoires tailles, et toutes battailles à demy relief. Ce qu'ayans admiré de prime face, et apres auoir estimé en leur fantãsie la singularite de l'ouurage, en fin ils defirent, briserent et rompirent, pour s'en seruir comme ils auoyent faicte du demeurant. Outre ceste sale ils treuuerent apres une porte fort basse, qui conduisoit à une autre, comme antichambre, ou il y auoit vn sepulcre avec son vase et son tymbre de marbre blanc, fort beau et reluisant à merueilles, lequel, pour n'auoir pas eu assez de temps, ils ne descouurirent, la retraict estant desia sonnee."

This account has the ring of truth, and it is curious that Professor Lethaby's interesting study should make no use whatever of it. Careful working with it and Newton's data in mind, and perhaps further notes of the remains at Budrum, may yet give us a restoration more convincing than any yet produced. Pullan's plan shows, on the west of the site, the rock-cut stair down which the coffin of Mausolos was doubtless taken, and this stair (filled in and hidden after the funeral) is not on, but is much to the north of, the centre line of the monument.

The opening through which the coffin passed is similarly far from the centre, and the great block of stone which closed the opening shows by its bronze dowel that it was intended never to be removed. Beyond this stair and the opening at its foot there is no proof of the position of the actual sepulchre.

But the unsymmetrical position of this opening might very well agree with the theory that, as in the Pyramids, some attempt was made to mislead possible searchers as to the actual position of the tomb itself, and that the relegation of the sarcophagus to an "ante-chamber," in spite of the existence of the "beautiful, large, square hall," was in accord with Egyptian precedent.

Now, if the main body of the monument was 108 × 127 feet or thereabouts, the Knights would hardly have "found that the deeper they went the more the structure was enlarged at the base," for these dimensions are the extreme dimensions of the foundations measured by Newton, and if the steps leading to the main building were upon these foundations clear room must be found for them.

On the other hand, if we accept Stevenson's main lines, the story of the Knights comes into conformity with the survey of the site. It would appear that they found the approach "perron," or some part of it, and some little masonry besides above ground, and these they first cleared away. Then came the digging "lower down" and the discovery and destruction, first, of the square hall with its battle scenes in relief, and afterwards of the "antechamber" with the sarcophagus.

There are one or two other points much discussed but not vital to the general appearance of the building. Newton says "one stone of the cella wall was discovered," and a marble beam in the Museum is said to be left rough at one end as for building into a wall. From these indications it will probably be safe to add a cella to Stevenson's scheme, which at once destroys the most obvious (though by no means fatal) constructive objection to his scheme—the very large ceiling of the pteron.

MATT. GARBUTT [*F.*].

9 Conduit Street, London, W., *5th February* 1910.

CHRONICLE.

Town Planning Conference, London, 11-16 July 1910.

Arrangements are in active preparation for a Conference on Town Planning to be held in London under the auspices of the Royal Institute in the month of July next. His Majesty has accorded his gracious patronage to the Conference and many distinguished gentlemen have accepted the position of honorary vice-presidents. The Corporation of the City of London have courteously granted the use of the Guildhall for the purpose of the inaugural meeting on the 11th July. The Lord Mayor and Lady Mayoress have given indications of their interest in the objects of the Conference and have kindly intimated their willingness to entertain members at a Conversazione to be given at the Mansion House during the week of the gathering. By the end of June the Institute will have entered into possession of the Galleries in the rear of No. 9 Conduit Street, and will have ample accommodation on its own premises for the various meetings and exhibitions. The Banquet of the Conference will be combined with the Annual Dinner of the Royal Institute, and will be held on Friday, the 15th July. Appended is a copy of the preliminary notice of the Conference which has been sent to all members of the Institute and Allied Societies, and to municipalities and other bodies interested:—

Dear Sir,—In view of the recent passing into law of the Housing and Town Planning Act 1909, it is of the utmost importance that the architectural development of towns should receive the most careful consideration. The Royal Institute of British Architects has therefore decided to organise a Conference to study the architectural problems involved in the improvement and extension of our cities. Your co-operation is invited in this Conference, which will be held in London from the 11th to the 16th July, at the Royal Institute, 9 Conduit Street, Regent Street, London, W.

His Majesty the King has graciously extended his patronage to the Conference.

The programme of the Conference will include an exhibition of drawings, plans, models, and literature bearing upon the subject, and a large number of town plans and views will be displayed by means of lantern slides.

It is expected that Papers will be contributed by leading authorities on the various aspects of town planning, and that there will be a large number of visitors from the Continent and America in addition to those interested in the subject in this country.

Membership of the Conference will be open to architects and all others, including ladies, interested in town planning. Members will be privileged to attend the Inaugural Meeting and the Receptions that will be arranged; all the Meetings of the Conference; the visits and the banquet (on payment of the necessary charges). And they will receive all the literature issued in connection with the Conference, including a copy of the illustrated volume of Transactions to be published subsequently.

The membership fee will be One Guinea. If those interested in the Conference will kindly fill up the accompanying form and send it to the Secretary, the Royal Institute of British Architects, 9 Conduit Street, Regent Street, London, W., they will receive further particulars of the programme of the Conference, with a form of application for membership.

As the number attending the Conference is necessarily limited, an early reply is desirable. We have the honour to be, dear sir,

Yours faithfully,

Ernest George, *President.*
Henry T. Hare, *Hon. Secretary.*
Ian MacAlister, *Secretary.*

The Prizes and Studentships 1910.

The Annual Exhibition of works submitted for the Prizes and Studentships in the gift of the Royal Institute was held in the Gallery of the Alpine Club from the 18th to the 29th ult. inclusive, and was visited by some 1,100 persons. The number of students competing was seventy, as against seventy-one last year and sixty-one the previous year. The President's Address to Students and Mr. Macartney's criticism of their work were delivered at the General Meeting last Monday, on the occasion of the Presentation of Prizes. Students mustered in strong force, and the authors of the Addresses and subsequent speakers had a highly appreciative and enthusiastic audience. The Royal Academy was represented in the persons of Sir Wm. Richmond, K.C.B., R.A. [*H.A.*], Sir Aston Webb, C.B., R.A. [*F.*], Mr. Edwin A. Abbey, R.A., LL.D. [*H.A.*], Mr. W. Goscombe John, R.A. [*H.A.*], Professor Reginald Blomfield, A.R.A. [*F.*], and Mr. F. W. Pomeroy, A.R.A. [*H.A.*]. Present as Sir Aston Webb's guest was Mr. Frank Darling, the distinguished Canadian architect, who began his architectural career in London, in the office of the late George Edmund Street.

Prize Drawings for Exhibition in the Provinces.

The following selection from the premiated designs and drawings in the Institute Prize Competitions will be exhibited during the next few months under the auspices of the Allied Societies:—

The Royal Institute Silver Medal (Measured Drawings).—Drawings of the Wellington Monument (3 strainers), by Mr. James Whitelaw (under motto "Roma"), awarded the Silver Medal and Ten Guineas; drawings of the Hôtel Carnavalet, Paris (2 strainers), by Mr. Cyril A. Farey (under motto "François Mansart"), awarded a Certificate of Hon. Mention and Five Guineas; drawings of the Palazzo della Gran Guardia Vecchia, Verona (1 strainer), by Mr. Herbert J. Rowse (under motto "Adige"), awarded a certificate of Hon. Mention.

The Soane Medallion.—Designs for a Shakespeare Memorial Theatre: 5 strainers by Mr. Alick George Horsnell (under motto "Mirth"), awarded the Medallion and £100; 2 strainers by Mr. Adrian Berrington (under motto "Horse Shoe"), awarded Certificate of Hon. Mention and Ten Guineas.

The Owen Jones Studentship.—Drawings by Mr. William Ongley Miller (3 strainers), awarded the Owen Jones Certificate and £100; drawings by Mr. Henry Robinson Wilkinson (2 strainers), awarded Certificate of Hon. Mention and £10. 10*s.*

The Pugin Studentship.—Drawings by Mr. Henry Hubert Fraser (3 strainers), awarded the Medal and £40; drawings by Mr. David John Chisholm (1 strainer) and Mr. James B. F. Cowper (1 strainer), awarded a Certificate of Hon. Mention and Ten Guineas each.

The Tite Prize.—Designs for a Sunk Garden surrounded by Loggie: 1 strainer by Mr. William A. Robb (under motto "Jupiter"), awarded a Certificate of Hon. Mention and Ten Guineas; 1 strainer by Mr. Anthony R. Barker (under motto "Comprised Within") and 1 strainer by Mr. William Friskin (under motto "Tomahawk"), awarded a Certificate of Hon. Mention each.

The Grissell Gold Medal.—Design for two Western Bays forming a portion of a Vaulted Church: 3 strainers by Mr. Charles Percival Walgate (under motto "Fra Angelico"), awarded the Medal and Ten Guineas.

The Arthur Cates Prize.—Drawings by Mr. Charles Denny Carus-Wilson (3 strainers), awarded the Prize of Forty Guineas.

A selection of the Testimonies of Study submitted for the Intermediate Examination.

International Competition for Monument at Berne.

The Swiss Federal Council has recently issued the programme of a competition for the erection of a monument at Berne to commemorate the foundation of the International Telegraph Union. The competition is open to all artists in the world; and an international jury, on which Sir George Frampton, R.A., is the British representative, will pronounce on the merits of the designs submitted.

The artist chosen for the purpose will be entrusted with the execution of the monument at a cost not exceeding 170,000 francs, all fees and charges included, with the exception of carriage expenses, customs duties, and the cost of the foundation up to the ground level, which will be borne by the Federal Council. The jury will have 20,000 francs at their disposal to reward deserving competitors.

Models must be deposited at the Federal Palace, Berne, before the 15th August 1910; and British artists who seriously intend to compete can obtain copies of the programme on application to the Secretary to the General Post Office, London, E.C.

Sir George Frampton, R.A. (90 Carlton Hill, St. John's Wood, N.W.), will be pleased to furnish information to intending competitors with regard to the site of the monument and its surroundings. Copies of the conditions, with plans of the site and photographic view, may be seen in the Institute Library.

The Chair of Architecture, University of Ireland.

The appointment of Sir Thomas Drew, P.R.H.A. [*F.*], to the Chair of Architecture at the new National University of Ireland has given great satisfaction in architectural circles in the sister island. The *Irish Builder* says:

> The wisdom of the Commissioners' action in this matter cannot be too warmly recognised. In paying Sir Thomas Drew a well-deserved compliment they have honoured themselves, served their University, and taken the largest possible step towards bringing systematic professional education within the reach of architectural students in Ireland: for it is not too much to say that no other man in Ireland could fill this Chair with the same dignity, erudition, and withal usefulness to his younger brethren as Sir Thomas Drew. Sir Thomas has long taken a deep interest in architectural education in Ireland, and in his younger days worked hard in educational matters. He was one of the promoters of the old Architectural Association of Ireland in the 'sixties, and while it existed he took an active part in its work. When the Association was revived in 1896 he not only was one of the first to join it, but by wise counsel and generous aid helped to set it on its feet. When the Association was, so to speak, without house or home, he placed a room in his offices at its disposal, together with the use of his excellent and well-selected architectural library, and these hospitable conditions the Association enjoyed for a number of years. . . . What is a singularly valuable attribute in one filling such a position as that of Professor of Architecture is Sir Thomas's warm and kindly interest in every young man seeking to begin the battle of life as an architect—a concern shown by sage counsel and friendly help, as many of our readers could, we doubt not, testify. His election as President of the Royal Hibernian Academy, and in the past his occupancy of the presidential office in the Royal Institute of Architects of Ireland, the Royal Society of Antiquaries of Ireland, and other honourable and artistic distinctions, serve to indicate a versatile range of accomplishments. In a word, we conceive the University to have been singularly fortunate in securing one of Sir Thomas Drew's standing to fill the Chair of Architecture, for we are certain he agreed to the proposal, not to suit his own convenience, or to fulfil any ambition, for after so long and busy a career he would be reasonably entitled to enjoy ease, did he desire it, but solely from a sense of duty to the profession in Ireland.

But even more important than Sir T. Drew's own peculiar fitness to fill with distinction a Chair in any University, is the ripe judgment and common sense he will bring to bear on the work of organisation to fit the school to becoming a blessing and not a curse to the profession at large by converting schools of architecture simply into establishments for the manufacture of architects, whence too often rising talent emerges half-fledged and ill-equipped with any but crammed and academic learning. . . . In Sir Thomas Drew's hands the profession will be assured on the one hand that the value of liberal, artistic, and academic discipline and training will not be minimised, and on the other hand that exotic or experimental systems will not be forced on at too rapid a pace to suit the country's artistic standing and possibilities.

International Housing Congress, Vienna.

The preliminary notice is to hand of the Ninth International Housing Congress, to be held at Vienna, 30th May to 2nd June, under the auspices of the Permanent International Housing Committee. The subjects to be considered comprise:—(1) Town Planning; (2) House Building; (3) The Cottage *versus* the Block; (4) Methods by which the Cost of Dwellings can be Reduced; (5) The Land Question; (6) Housing Inspection: Slum Improvement, and Slum Destruction; (7) Housing Finance and Taxation. The official languages will be English, French, and German, and the writers of papers are to be specially chosen on the ground of their expert knowledge of the subject. Englishmen announced to read papers include Messrs. Henry R. Aldridge, John H. Barlow, T. C. Horsfall, Harold Shawcross, Alderman Thompson, Raymond Unwin, and Councillor W. G. Wilkins. The National Housing and Town Planning Council are arranging for a party of British delegates to attend the Congress, and as an invitation has also been sent from Berlin urging that the British delegates should visit the Town Planning Exhibition, which will be then open in the Prussian capital, it has been decided to extend the journey to enable Berlin, and probably Dresden, to be visited. Membership of the party will be strictly limited to representative municipal councillors and officials, architects and surveyors, and members of the National Housing Council. All particulars may be had of Mr. Henry R. Aldridge, Secretary of the National Housing Council, 18 Dulverton Road, Leicester, who will act as Secretary to the British Delegates.

Dry-rot.

A fresh illustration of the dangers due to dry-rot was furnished by the results of a fire which occurred not long ago at the Gledhill Wall Paper Factory in New York City, particulars of which were given in the *Engineering Record* of New York for the 8th January. The factory was a six-story and basement building covering a site approximately 60 × 200 feet in area. Except for a single bay at each end it was of timber construction. The posts of the three lower floors were white oak and the girders of yellow pine, while the posts as well as the girders of the remaining floors were of pine. The bottom posts were 16 inches square, and those in the top tier 10 inches square. The fire broke out about 3 o'clock in the afternoon, and was under control at 6 o'clock, at which time the floors were practically all in place, although the roof had fallen. Shortly afterwards the floors began to fall, and before long the whole building had collapsed into the basement. The reason for such collapse was so inexplicable that an examination of the wreckage was made by Professor Ira H. Woolson, of Columbia University. The posts and girders were joined by heavy cast-iron caps, with 4-inch sockets above and below for the posts, and overhanging brackets on which the girders rested. With the exception of this fitting, which sealed the ends of the posts, they had been put into the structure without further treatment. Professor Woolson, in his report, stated that many of the oak posts were burned off completely at their upper ends just under the caps, usually from 12 to 18 inches being destroyed in this way. The remainder of them was sound, except for a char, ½ to 1 inch deep, which did not materially injure their strength. In a few cases the bottoms of the posts had been partially burned. It was found that the majority of the oak posts had been eaten away by dry rot in the centre, so that the outside shell was all the sound wood that remained at the tops of most of them. The yellow pine posts were in much better condition, although evidences of dry-rot were found in some of them. Professor Woolson is convinced that the final collapse of the frame was due to the burning out of the dry punk wood inside the posts, and he considers it probable that the initial failure resulted from the same cause. It is his opinion, furthermore, that the condition of the posts was such that had a fire not broken out, portions of the building would probably have collapsed before long, owing to the deterioration in the strength of the posts. The *Engineering Record* states that the old requirement for the safe use of such posts had been overlooked in this case. This requirement is that all wooden posts must have a 1½-inch hole bored through them lengthwise, and two ½-inch holes crosswise near the top and bottom.

Mr. James Bryce on Architectural Opportunities.

The views of so distinguished a layman as Mr. James Bryce, British Ambassador at Washington, on the subject of architecture have some special interest for architects, and we print below extracts from a speech of his delivered at the banquet of the 42nd Convention of the American Institute of Architects. The speech will be found in its integrity in the recently published *Proceedings* of that body.

Those of you who study your art; those of you who know what has been done by the great architects of former times, and especially those of you—and I suppose this covers most—who pursue the study by examining the noble

buildings which have been created by the genius of earlier times in Europe and Western Asia, you have daily an undiluted pleasure in your study. I can remember no happier days than I have spent, and I am sure they would have been even happier had I had the special technical knowledge which you possess, in examining old churches and old castles and old city walls and palaces, especially in the cities of Italy. One can think of no greater or higher pleasure than in seeing what man has done in the pursuit of beauty and convenience, that is to be found in following the progress of architecture from the eleventh down to the eighteenth century, as one sees it in France, Italy, Germany and England. To this I may add that your art has a special claim upon the student, because it is more than any other art the interpreter and the sister of history. There is nothing that helps so much to a comprehension of history as the study of the buildings of a country. In them you see what the needs of the day were, what the thoughts and ideas of the time were, what its aims were; you see exactly what it sought in the way of defence and in the way of comfort; you see what form of interior structure its religion prescribed for houses of worship; you see by tracing the type of buildings in each particular province or district of a country what were the political influences that operated upon that district at that time; and you are able, in a word, to read out of the buildings of a country much of its history which otherwise might remain unknown. I do not believe that there is anything which could be better done for a student of history than to send him on an architectural tour, and make him interpret the buildings into the history and interpret the history through the buildings.

When one thinks of all the exquisite buildings which adorn such a country as Italy or France, one has to remember that they represent the accumulated ingenuity and talent and labour and taste of many generations of men. None of those generations of men ever had such an opportunity as the architects of the last sixty years have enjoyed. It is true that the architects of the last sixty years, in some ways, have not had quite so free a field, because they have been perhaps more hampered by committees, trustees and municipal councils and other authorities that cannot realise, as did Lorenzo the Magnificent or some equally large-minded prince, that the great architect ought to have *carte blanche* for the building he has planned. But, apart from that, you have had in this country, and in western Europe also, extraordinary opportunities during the last sixty years. Never, I suppose, was there a time when so many buildings, and so many great buildings, were erected. I am sorry that in England we have used our opportunities in one respect rather badly. We have committed a crime which you here could not commit—I hope you would not have committed it; but, at any rate, you could not. We have been restoring our ancient churches, sometimes out of recognition, and in that way we have unfortunately obliterated a great deal of the history that was written in those churches. Within the last twenty-five years, largely owing to the influence of an enlightened band of scholars and artists, the most conspicuous of whom was William Morris, we have stopped that process as far as possible, but not until a great deal of harm had been done. Here you have not had so many ancient buildings to injure; anyhow you have not injured to anything like the extent we have done. I was, however, about to say that in England we have not made full use of the great opportunities for original genius in architecture which this immense quantity of buildings provided. We have not succeeded there in getting hold of anything like a distinctive style. When we look back upon every century from this, to the beginnings of the Romanesque in the tenth or eleventh century, we see that almost every century, almost every half-century, has something distinctive in the style of its time; but if we look in the nineteenth century—the same thing is generally true if we go into France and Germany also—we see a motley array of different styles, attempts made to build sometimes in one and sometimes in another style, and to combine them, and we cannot feel that the result is worthy of the amount of knowledge that has been brought to the work and the amount of money that has been spent upon it.

Here in the United States you seem to me to have made one new departure in which you have gone ahead of us Europeans. Your designs for houses in cities and perhaps even more for suburban houses and seaside houses, etc., have more variety, more freshness, more charm, than the parallel designs have in Western Europe. You have certainly made more use of some of the early mediæval forms of architecture than we have succeeded in doing in England, and in that respect I think your recent architecture shows more originality than ours does. But still, even here I suppose you would agree that you have not succeeded yet in either inventing an absolutely new style, which perhaps may be impossible—after all, the possibilities of invention are limited—or in so combining different styles as to make one which shall be distinctive of the nineteenth or twentieth century. Now that is just what we laymen and especially we students of history are longing for. Three or four hundred years hence, when the student of architecture turns back to the preceding centuries he will find, as he comes down from the eleventh to the eighteenth, that there is a regular succession, and that he can fix a building pretty well by its general style and structure and its mouldings and its ornaments and so forth; but when he comes to the nineteenth century he would be at a loss. Now, is not the time about due when you must be beginning to do something desperate? This proposition is a very presumptuous question for a layman to put, but I put it only as an ignorant layman's question, and it may be that that thing cannot be done; but I feel, projecting myself into the position of the historian of the twenty-fifth century, that it would be an interesting thing for him to be able to realise what the twentieth century was like by its buildings as he realises what the thirteenth, fourteenth, and fifteenth were. Certainly there is still in this country at any rate a great field open for him.

The late Benjamin Tabberer [*F.*].

Mr. Benjamin Tabberer, whose death occurred at his residence, "Alverstoke," Blackheath, on the 26th ult., had been a Fellow of the Institute since 1882. Mr. Alfred Conder [*F.*] has kindly furnished the following particulars of his career:—

Benjamin Tabberer was born at Derby on the 1st October 1831. He was articled to Mr. Henry Goddard, architect, of Leicester, and commenced practice in the City of London in 1861. For many years he served on the Board of Examiners and on the Science Standing Committee of the Royal Institute. In 1870 he was appointed District Surveyor for Greenwich, and in 1902 the London County Council added Deptford East to his Greenwich district. For twelve years he acted as Hon. Secretary of the District Surveyors' Association and subsequently served as President. Mr. Tabberer was a member of the Barbers' Company and of the Surveyors' Club, and at one time held office as churchwarden of St. Michael Bassishaw and subsequently St. Lawrence Jewry. He practised as an architect and surveyor in Basinghall Street up to the time of his death.

At the General Meeting of the Institute last Monday a vote of sympathy and condolence was passed to the relatives of the late member.

Honours and Appointments.

Count Plunkett, F.S.A. [*H.A.*], has been created a Knight Commander of the Order of the Holy Sepulchre.

Mr. Edward Warren, F.S.A. [*F.*], has been elected Hon. Corresponding Member of the American Institute of Architects.

Mr. Francis S. Baker [*F.*], Hon. Secretary R.I.B.A. for Canada, has been elected President of the Royal Architectural Institute of Canada in place of Mr. A. F. Dunlop, R.C.A., resigned.

MINUTES. VII.

At the Seventh General Meeting (Ordinary) of the Session 1909–10, held Monday, 31st January 1910, at 8.15 P.M.—Present: Mr. Ernest George, A.R.A., *President*, in the Chair; 29 Fellows (including 16 members of the Council), 25 Associates (including 2 members of the Council), 6 Hon. Associates, and numerous visitors—the Minutes of the Meeting held 17th January 1910, having been published in the JOURNAL, were taken as read and signed as correct.

The Hon. Secretary announced the decease of Benjamin Tabberer, *Fellow*, and a vote of condolence was passed to his relatives.

The following members attending for the first time since their election were formally admitted by the President—viz. James Straton Ferrier, Benjamin Vincent Bartholomew, Charles Denny Carus-Wilson, *Associates*; Frederick William Pomeroy, A.R.A., *Hon. Associate*.

The following candidates for membership, found by the Council to be eligible and qualified according to the Charter and By-laws, were nominated for election—As FELLOWS (3): Thomas Dinham Atkinson [*A.* 1889] (Cambridge); Percy Erskine Nobbs, M.A. [*A.* 1900] (Montreal); Alexander Nisbet Paterson [*A.* 1890] (Glasgow). As ASSOCIATES (40): John Cooper Ainsworth, M.A. [*P.* 1903, *S.* 1908] (Manchester); John Gordon Allen [*P.* 1902, *S.* 1907]; Robert Atkinson [*Special Examination, Tite Prizeman*, 1908]; Josiah Auty [*Special Examination*] (Morley); Quentin Mangnall Bluhm [*P.* 1902, *S.* 1904] (St. Anne's-on-Sea); Charles Geoffrey Boutcher [*P.* 1904, *S.* 1905, *Qualified* June 1908]; Arthur Francis Bryan [*P.* 1902, *S.* 1906]; George Herbert Burstow [*Special Examination*] (Brighton); Richard Thwaite Chapman [*P.* 1904, *S.* 1906] (Bolton); Edward Ernest Blunt Claypole [*P.* 1898, *S.* 1902]; John Adam Davidson [*P.* 1905, *S.* 1906] (Londonderry); Claude William Davis [*P.* 1902, *S.* 1906] (Edgbaston); Harry Alderman Dickman [*P.* 1904, *S.* 1906] (Nottingham); Alexander Houston Douglas [*P.* 1901, *S.* 1905]; Percie Ion Elton [*Special Examination*]; Edwin Finn [*P.* 1902, *S.* 1905] (Whitstable); William Goodchild [*P.* 1904, *S.* 1906] (Ipswich); Leonard Rome Guthrie [*Special Examination*]; Charles Ernest Hanscomb [*P.* 1904, *S.* 1905]; Robert Edwin Hastewell [*P.* 1901, *S.* 1903] (Northumberland); Frederick George Brudenell-Bruce Hawkins [*P.* 1908, *S.* 1908]; Francis Henry Heppel [*P.* 1903, *S.* 1907] (Worcester); Henry Clifford Hollis [*P.* 1902, *S.* 1903]; William Charles Maxwell [*Special Examination*] (Belfast); William Milburn, jun. [*P.* 1902, *S.* 1908] (*Saxon Snell Prizeman* 1908, *Godwin Bursar* 1910) (Sunderland); Arthur Hamilton Moberly, B.A. Cantab. [*P.* 1907, *S.* 1908]; Robert Wright Orme [*P.* 1902, *S.* 1904] (St. Anne's-on-Sea); Robert Orr [*P.* 1900, *S.* 1906, *Qualified* June 1909]; Francis Osler [*S.* 1904]; James Page [*P.* 1899, *S.* 1908]; William John Roberts, M.A. [*P.* 1908, *S.* 1908] (*Ashpitel Prizeman* 1909) (Manchester); George Henry Rowledge [*P.* 1902, *S.* 1905] (Manchester); William Henry Sagar [*P.* 1904, *S.* 1907]; Hugh Henry Scott-Willey [*P.* 1902, *S.* 1906]; George Marrison Stone [*P.* 1900, *S.* 1904]; Charles Stonehouse [*P.* 1900, *S.* 1903] (Blackburn); Francis Gordon Troup [*P.* 1907, *S.* 1909]; Vivian Ware [*P.* 1902, *S.* 1906] (Bournemouth); John Woollatt [*P.* 1904, *S.* 1905] (Nottingham); Cecil Laurence Wright [*P.* 1898, *S.* 1905]. As HON. ASSOCIATE: Archibald Dunn, Bournemouth.

The President announced that the Council proposed to submit to His Majesty the King the name of Thomas Graham Jackson, R.A., F.S.A., as a fit recipient of the Royal Gold Medal 1910.

The President having delivered an ADDRESS TO STUDENTS, and Mr. Mervyn Macartney, F.S.A. [*F.*], having read a CRITICISM OF THE DESIGNS AND DRAWINGS submitted for the Prizes and Studentships for the current year, a vote of thanks moved by Professor Reginald Blomfield, A.R.A., *Vice-President*, and seconded by Sir William Richmond, K.C.B., R.A. [*H.A.*], was carried by acclamation.

The Presentation of Prizes was made by the President in accordance with the Deed of Award, and the Travelling Students were introduced, as follows:—

INSTITUTE SILVER MEDAL.
- The Medal and cheque for £26. 5*s.* to Mr. J. A. O. Allan.
- Certificate of Hon. Mention to Mr. J. Nixon Horsfield (represented by Mr. Myles Horsfield).

INSTITUTE MEASURED DRAWINGS MEDAL.
- The Medal and cheque for £10. 10*s.* to Mr. James Whitelaw.
- Certificate of Hon. Mention and cheque for £5. 5*s.* to Mr. Cyril A. Farey (represented by Mr. T. A. Lodge).
- Certificate of Hon. Mention to Mr. Herbert J. Rowse (not present).

SOANE MEDALLION AND £100.
- Medallion to Mr. Alick G. Horsnell.
- Certificate of Hon. Mention and cheque for £10. 10*s.* to Mr. Adrian Berrington.

OWEN JONES STUDENTSHIP.
- Certificate to Mr. William Ongley Miller.
- Certificate of Hon. Mention and cheque for £10. 10*s.* to Mr. Henry Robinson Wilkinson.

PUGIN STUDENTSHIP.
- Mr. H. H. Fraser introduced as the winner of the Studentship.
- Certificate of Hon. Mention and cheque for £10. 10*s.* to Mr. D. J. Chisholm.
- Certificate of Hon. Mention and cheque for £10. 10*s.* to Mr. James B. F. Cowper.

GODWIN BURSARY.
- Mr. Wm. Milburn, jun., introduced as the winner of the Bursary.

TITE PRIZE.
- Certificate of Hon. Mention and cheque for £10. 10*s.* to Mr. William A. Robb (not present).
- Certificate of Hon. Mention to Mr. Anthony R. Barker.
- Certificate of Hon. Mention to Mr. William Friskin (not present).

ARTHUR CATES PRIZE.
- Cheque for £42 to Mr. C. D. Carus-Wilson.

GRISSELL GOLD MEDAL.
- Medal and cheque for £10. 10*s.* to Mr. C. P. Walgate.

ASHPITEL PRIZE.
- Books value £10 to Mr. William John Roberts.

OWEN JONES STUDENTSHIP 1908.
- Cheque for £50 to Mr. A. E. Martin (second moiety).

PUGIN STUDENTSHIP 1909.
- Medal and cheque for £40 to Mr. S. H. Miller.

The proceedings terminated at 10 P.M.

Erratum, JOURNAL, 22nd January, p. 275.—In Mr. Ernest Shearman's letter, "The Church Organ," 2nd col., the opening of the 3rd paragraph should read: "With a small choir-organ, troubles of another kind come in," &c., &c.



ST. SWITHIN'S QUADRANGLE, MAGDALEN COLLEGE, OXFORD.

Photo, Wheeler, Oxford

THE LIFE AND WORK OF GEORGE FREDERICK BODLEY.

By Edward Warren, F.S.A. [*F.*].

Read before the Royal Institute of British Architects, Monday, 14th February 1910.

In accepting the flattering invitation of the Council to read a Paper here upon the life and work of my former master, George Frederick Bodley, I feel that I have committed myself to a task of some difficulty and delicacy. For Mr. Bodley, as you know, worked for many years in partnership with Mr. Thomas Garner. That partnership, indeed, covered the middle period of his long, active, and distinguished career, a period of more than twenty-five years, and one which, on account of its full productiveness and of its marked developments, it would be impossible in any sense to ignore.

It is always difficult, where an estimate of individual character is sought, to deal with the outcome of such a collaboration, and a partnership in art presents peculiar difficulties, where it implies imaginative conception of a strongly defined order. The attempt to be exactly just to both collaborators, to apportion to each his due meed of influence and of creative industry, necessarily brings one upon delicate ground. To what extent I may be qualified for this attempt, I must leave to the, I hope, indulgent criticism of my hearers. As far, however, as intimate connection, I am happy in being able to say, of long and close friendship, with both partners, may have fitted me for that task, I can plead no extenuation.

My intention is, with your permission, to divide this review of Mr. Bodley's life and work into three periods—the youthful initial period of training and of individual work, the middle or collaborative period, and the final one of reversion to single practice—and to deal chiefly and as far as possible with such instances of creative work, for description and illustration, as are entirely attributable to Mr. Bodley, or which are strongly characteristic of his manner and influence.

In making this discrimination, it is no derogation of the high talent, marked ability, and extraordinary industry of Mr. Garner, to say that, if no such collaboration had ever come about, and if, therefore, the career of Mr. Bodley had to be considered as single and unassisted, and his reputation had to rest entirely upon his wholly individual work, his title to distinction could hardly be diminished. Before going farther I wish to acknowledge my debt to Mr. Cecil Hare for the verification of facts and dates, the loan of many photographs and drawings, and kindly help in all directions.

THE INITIAL PERIOD.

George Frederick Bodley, who was descended from the family of Sir Thomas Bodley of Oxonian fame, was born at Hull in 1827, the son of a physician of considerable talent and repute. His mother was a lady of high intelligence, and of unusual gifts and attainments, to whom her son George ever attributed the decisive influences of his life. While he was still a boy, his father, Dr. Bodley, moved to Brighton, and it was in that town that George first met Sir Gilbert Scott, whose pupil he subsequently became, incited to that course, as Professor Simpson has stated in the pages of the JOURNAL,* by reading Bloxam's *Gothic Architecture*.

To Sir Gilbert, then Mr. Gilbert Scott, he served an old-fashioned, long apprenticeship of five years, living in his master's house in Regent's Park. He found, as he often told me, his early studies and employment in Sir Gilbert's office rather dreary. He did not take kindly to the dry and academic expositions of Classic architecture, and of the "Orders," which he met with at first, but his enthusiasm revived with employment upon drawings for Gothic buildings, and I remember his telling me that he set out the arcades of St. Michael's Church, Great Peter Street, Westminster.

Unlike many, if not most of us, this young architect had not long to wait for professional opportunities. Work came to him almost at once upon the expiry of his apprenticeship, and his first commission was to add an aisle to a church at Bussage, in Gloucestershire, for Thomas, the brother of the better known John Keble. This was followed by a constant flow of work, almost entirely upon churches, and, launched thus upon the full flood of the Gothic revival, ardently enthusiastic, brimming with energy, and rejoicing in the early recognition of his ability, he began a career of promise, the close of which, in honour and dignity, came after more than half a century of constant employment, barely two years ago.

Drilled, during his five years at Sir Gilbert's, in a somewhat rigid convention of English Gothic, he, not unnaturally, began his active independent career with a revolt. This is very evident in his first complete church, that of St. Michael at Brighton. Tired of the formalised versions of English thirteenth and fourteenth century styles, with the stereotyped and elaborate mouldings and carvings which characterised the school in which he had been trained, he designed this church in an extreme severity of form and detail, and with a character suggesting the Early French rather than the Early English type. This building, now ruthlessly spoiled by the addition of a large incongruous nave and aisle by another hand, shows an original and most refined adaptation of a cognate style. Mr. Bodley struck, with this his first church, a note which is never absent from any of his subsequent work, that of suave severity. St. Michael's is—alas! was—a simple building of red brick, with a rather narrow and lofty nave of four arcaded bays, roofed with a simple trussed-rafter roof, and heavy "lean-to" aisles, lit from clerestory windows of two lights each, and by a very simple and effective group, consisting of a "rose" of circular lights, and two two-light windows in the western wall, all handled with breadth and refinement in the bar-tracery manner. The chancel, comparatively short and lower than the nave, is divided from the latter by a sharply accentuated pointed arch and by a low screen wall of stone and marble. The arcade of the nave has short circular stone piers and heavy simply carved square

* 11th January 1908.

capitals supporting acutely pointed stone arches with absolutely plain flat soffites, without a vestige of moulding. The warm red brick facing of the internal walls is quietly striped above the



CHURCH OF ST. MICHAEL AND ALL ANGELS BRIGHTON.

arches with bands of black brick and of stone—in a manner suggesting Italy rather than France; and the arches are accentuated by a plain label band of black brick. The proportions

are studied and sweet, the colouring is harmonious, the whole thing bears the impress of clear conception and strong individuality, it is imbued with simple dignity and refinement. The interest of this first fresh work is enhanced by the co-operation of another youthful master-hand: William Morris contributed the beautiful and extremely characteristic glass that fills the western windows.

Some of his later contemporaries have complained that he showed little interest in the arts and crafts movement of the last two decades, and have most erroneously concluded that he did not sympathise with the alliance of the diverse arts and the collaboration of artists. Nothing could be farther from the truth, as the facts of his early life sufficiently manifest. In close alliance and personal friendship with William Morris, Edward Burne-Jones, Ford Madox Brown, and Dante Gabriel Rossetti, in the earliest days of the Pre-Raphaelite Brotherhood, it was Mr. Bodley who, of all architects, bestowed not only sympathy but active help and opportunities of work in his own buildings upon those artists. He gave William Morris his first chance of ecclesiastical stained glass, in his church at King's Stanley, Gloucestershire, and repeated opportunities at St. Michael's, Brighton, and elsewhere. Burne-Jones was also employed at Brighton upon a painted reredos. In the church of St. Martin's, Scarborough, he found employment for the whole band, William Morris carrying out stained glass, and Rossetti, Burne-Jones, and Madox Brown painting pulpit and reredos. William Morris and Philip Webb painted the roof, while Bodley himself painted a portion of the east wall. It was Bodley who started C. E. Kempe in stained glass, advised him as to studies, and gave him his earliest employment. He was one of the founders, and in the sense of applied decoration and colour work generally, the life and soul of Watts & Co., a firm which still maintains a high reputation for wall-papers, hangings and furniture. Bodley, by the way, designed one or two of William Morris's early wall-papers and assisted and advised in designs for glass, tiles, and church fittings.

Within the next few years, in the fresh vigour of his young enthusiasm, he was constantly and happily busy with new churches—and of these, St. Martin's at Scarborough is one of the most interesting, not only for its intrinsic beauty and distinction, but for the fact that the architect here found a field, in the decorative accessories, for the co-operation of his friends and fellow enthusiasts. In character and detail this church belongs distinctly to Mr. Bodley's early manner, showing a decided leaning towards the severity of thirteenth-century Gothic, and still with a flavour of France, though that is less pronounced than at Brighton. The church consists of nave, aisles, and chancel; the piers of the nave arcade are short, sturdy, and octagonal in plan, the arches tall, acutely pointed, and very simply moulded, the voussoirs irregularly striped in brown and grey stone. An elaborately carved and moulded rood and screen were added by Mr. Bodley in later years; the pulpit, whose panels are filled with figures of saints richly painted and gilt, by Rossetti, dates with the church, and is of singular beauty and interest.

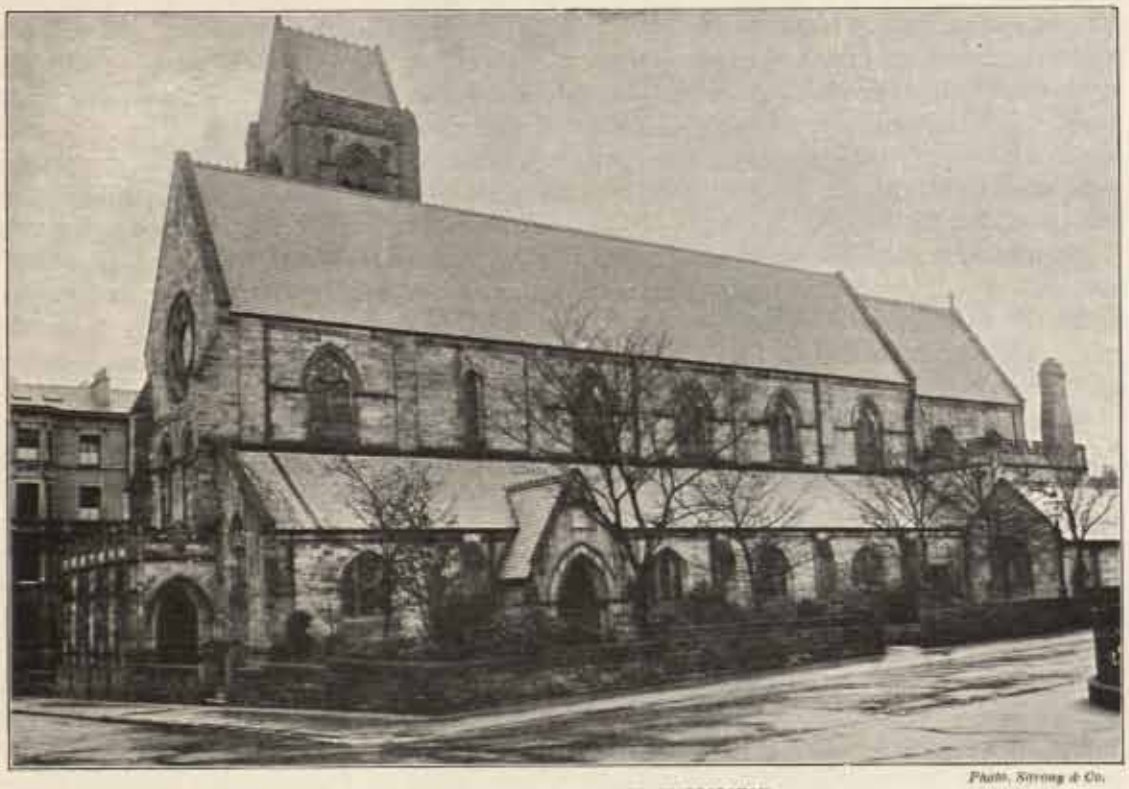
The church of St. Martin was quickly followed by the building of a Parsonage House, simple, severe, and full of quiet character, and by a second church, that of All Saints, in the same town.

Mr. Bodley's name is so intimately associated with ecclesiastical work that few people are aware of the considerable number of civil buildings for which he has been responsible, in his early days singly, and afterwards conjointly with Mr. Garner. Some of them, and the more important, we shall notice later on as the work of the partnership; for the present, as an instance of skilful and refined treatment bestowed upon small and simple buildings, I wish to note the charming little villas designed by Mr. Bodley for their charming little site at Great Malvern.

These present his extremely individual version of the English early eighteenth-century type of small dwelling-house. Their charm is like that of Jane Austen's heroines; it is an affair of character and staid refinement combined with a certain little air of dignified propriety. Externally they are pleasant in the warm colouring of brick and tiles, in the balance of their careful

proportions, and in their instinctive adjustment to the site. Internally they are full of graceful touches, and, both inside and out, are delightful houses for quiet gentlefolk.

For the first few years Mr. Bodley's small but steadily maintained practice seems to present almost ideal conditions for a young architect of quiet and reserved but strong character, of high courage and of great patience, absorbed by the love and the study of his art, free from professional ambitions, and happily saved, by the possession of modest private means, from the anxieties and compulsions of money-earning. He lived during this early period with his mother, in Harley Street, where he worked single-handed, or with occasional assistance only, for several years. Commission followed commission at comfortable intervals, without rush or hurry, and though requiring, as he frequently told me, very strenuous days and laborious nights



Photo, Sirrong & Co.

CHURCH OF ST. MARTIN-ON-THE-HILL, SCARBOROUGH.

at times, leaving upon the whole ample time for thought, for music—to which he was always passionately devoted—for reading, for the enjoyment of the society of his friends, amongst whom were conspicuous the various members of the Pre-Raphaelite Brotherhood; for delightful journeys of study, in France, Italy, and Germany, as well as in England, and for occasional indulgence in the pastimes he preferred. Of fine physique and strong and athletic figure, he was a great walker, a keen fisherman, and, as I have been told by contemporaries, a very competent cricketer. Amongst the Pre-Raphaelites I think he felt especially the dominant influence of Rossetti, for whose painting, but especially for whose poetry, he always retained and expressed the warmest admiration. His own poetic temperament and mystic sense responded readily to Rossetti's. Bodley was himself endowed with a certain gift of verse, and he published in 1899 a modest little volume of his poems. His family and social connections were such as to bring him repeated professional opportunities, chiefly ecclesiastical, and his marked success in the

handling of each rapidly brought another. He detested competitions, which were essentially opposed to his quiet reflective nature and abstract idealism; for, from beginning to end, before and beyond all things, he was an idealist. As I think of his early opportunities, and of their realisation in the buildings that I know, it seems to me that never were circumstances kinder to a young architect, in giving him such an easy, sustained, and gradual flow of work so well suited to his abilities and his temperament; so well adjusted, as it were, to develop his talent, to exemplify his aims, and to employ his zealous industry. A happy train of chances—and he was happy in his work, and happy in its success and the quiet growth of his reputation for admirable work, of unique character and high distinction.

When we think of the formal baldness, the stiff, uninspired Gothic of the average churches of the "fifties" and the "sixties"—Gothic revived, indeed, but not revivified—the refinement, the grace of proportion, and the mastery of detail shown in Bodley's early work give him easy predominance over all but a very few of his contemporaries. The natural comparison that arises is with Butterfield, Pearson, and Street, the two first his seniors; the last, I think, slightly his junior. It is, however, with Butterfield, his real compeer, for whose work he always expressed warm admiration, that the comparison becomes nearest. The two men, indeed, resembled each other in ideals, and to some extent in architectural manner. Both had a predilection for lofty interiors, both had a fine sense of line and proportion, both had a strong appreciation of fourteenth-century Gothic, both in their earlier work cultivated a severe refinement, and both foresaw and prepared for, in designing their churches, the ultimate colour scheme and decorative finish of the whole. In regard to the decoration of interiors, they differed widely in manner and method, but there is a latent poetry in the work of both. Butterfield was wont to rely chiefly, as Professor Simpson has very aptly pointed out, upon the native colouring of materials —stone, brick, or marble—with minor assistance from applied decoration. Bodley, while delighting in the fine colour of dressed stone, cared little, and ever increasingly less, for exposed brickwork in interiors, and, prompted by his acute instinctive colour sense, revelled from the first in the use of paint and of gilding upon roofs, walls and woodwork, and was never content with a church until he had brought the whole interior into harmony as he conceived it—a harmony which governed the whole design and its furniture down to the minutest detail of glass, metal, or needlework. Marble he almost never used in a church, except for floors, or for an occasional font.

As work increased upon his hands he began to find the need of skilled assistance, and turned to his friend Thomas Garner, who had followed him as a pupil in Scott's office, and who was beginning to develop a small practice of his own in his native county of Warwickshire. Mr. Garner, at first, worked for him in the ordinary sense as an occasional assistant; but his abilities, enthusiasm, and remarkable knowledge made of him an assistant quite outside any ordinary sense, and his co-operation, though for some time without partnership, grew steadily closer and more important.

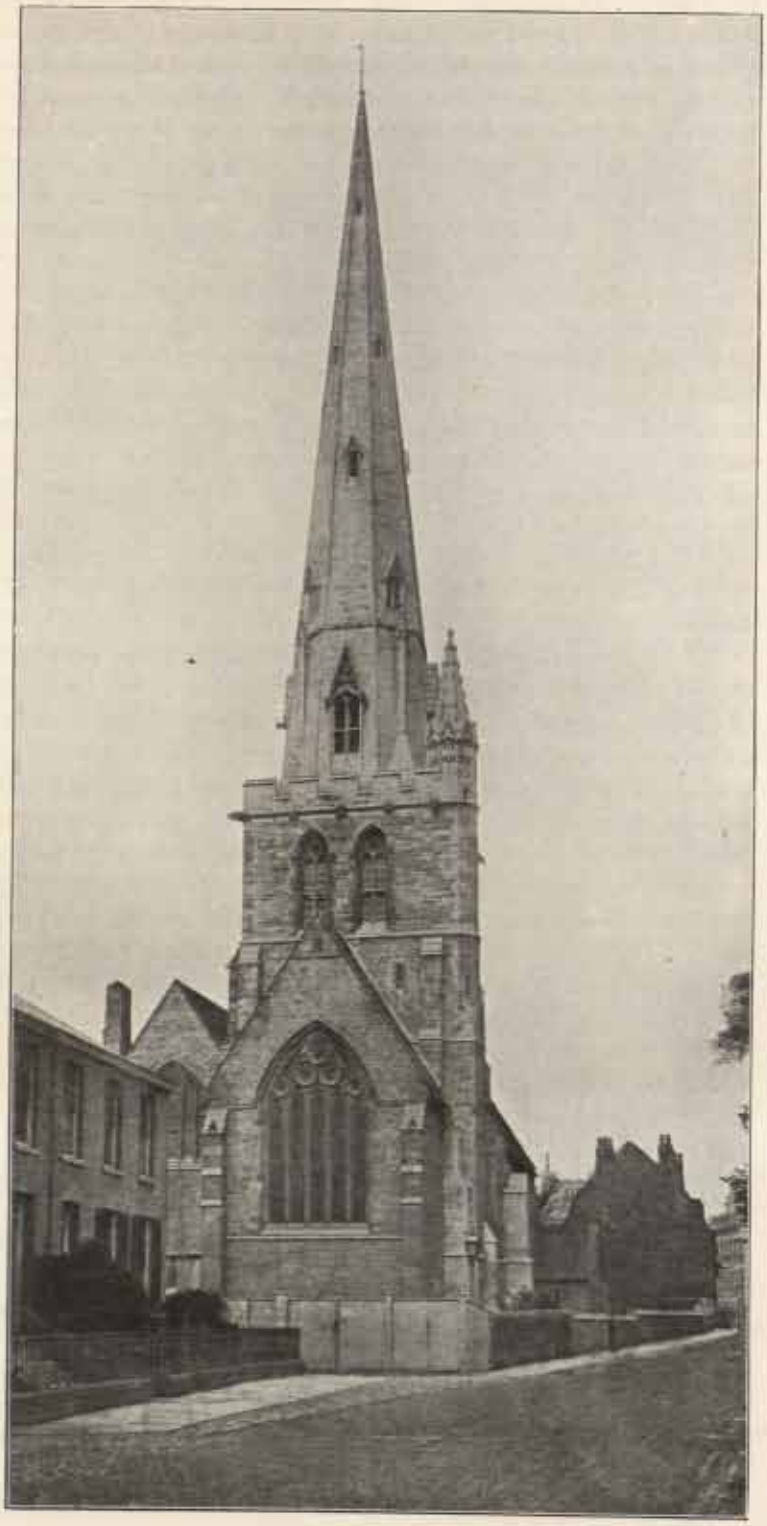
THE MIDDLE PERIOD.

As we near the middle or partnership period, we perceive that a marked change has been taking place in Mr. Bodley's handling of Gothic architecture. The French feeling has waned, and the type has become more determinately national. If his early taste, indeed, inclined towards French types, that of his future partner was pronouncedly English; but the change alluded to had set in some time before their conjunction, and the church of St. Salvador's, Dundee, seems to mark a middle point in this conversion. Austere in form, but with a tempered austerity, there is a fine and graceful severity about its sharply pointed nave arches, which die on to capless piers, and the accentuation of the bays by the slim wall shafts which run up to

carry the roof principals; a gorgeous reredos, a gilded wrought-iron screen, and diapered wall-painting have been added in later years.

For the last thirty years Mr. Bodley's Gothic has always been, in so far as constructive detail is concerned, in the "decorated" manner; but that manner has been so intensely perceived and assimilated as to become a natural, almost intuitive, expression. His strong individuality shines through his adoptive fourteenth century, as Wren's shone through his adoptive Palladian style. It was doubtless kindred sympathies, kindred appreciations, and kindred studies that drew together the partners, who for little short of thirty years were associated in strenuous endeavours to redeem the unhappily degraded art of architecture, and whose influence and example have had so marked an effect upon the work of their contemporaries.

The co-operation with Mr. Garner began, without actual partnership, upon the church of All Saints, which stands opposite the great gate of Jesus College at Cambridge, and whose shapely spire is well known to all frequenters of that city. This is a building of a simple and direct but effective plan, and consists of a nave, one aisle on the south side, a chancel, and vestry. The tower is supported upon two acutely pointed arches over the chancel, these arches defining the limits respectively



ALL SAINTS', CAMBRIDGE.

of chancel and sanctuary. The church is profusely painted as to its walls and roofs. The latter are of trussed rafter form, with tie-beams; and the counter-change of a very simple gamut of colours—red, white, and dark grey—makes an unobtrusively warm and rich decoration for rafters, interspaces, and beams. The east window is filled with Morris's glass; not, however, of the most successful character.

This period is, unhappily, marked by a physical misfortune of such gravity as might well have wrecked the career of a character of less fortitude, determination, and enthusiasm than Mr. Bodley's. He was stricken with a long, seriously dangerous, and painful illness, arising from blood-poisoning, the result apparently of a conscientious inspection of some fetid burial vaults beneath a church at Louth. Seized with this illness, on the very evening of the inspection, he nevertheless insisted upon travelling back to London, where he had to keep his bed for months, and to leave it with his black hair turned white, and crippled for life by lameness, which rendered walking painful, and more active exertion impossible. This lameness subjected him to recurrent periods of disablement and pain, and, moreover, rendered his constant journeys and his minutely careful supervision of buildings onerous and difficult. He bore this affliction to the end with admirable patience and courage, never complaining, and never allowing his disabilities seriously to interfere with his work.

The first long period of illness, however, obliged him to seek and to rely upon the capable assistance of his friend Thomas Garner, and thus led directly to recognised collaboration.

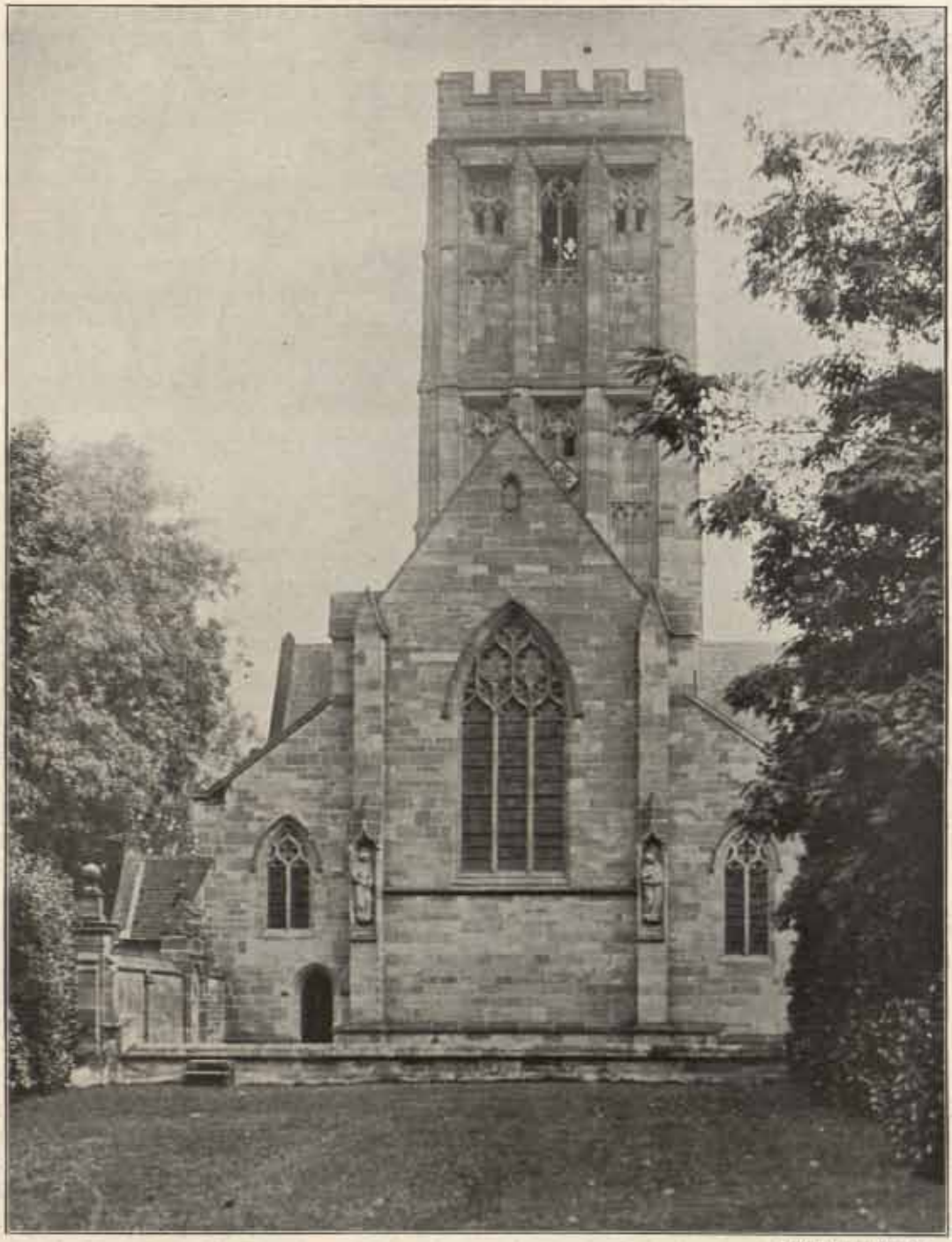
A formal partnership was entered into in 1869, and amongst other work which it immediately shared was the church, initiated by Mr. Bodley, of St. John, at Tue Brook, Liverpool, a church of distinctly English fourteenth-century character, not elaborate in structural detail, but very elaborately furnished and decorated. The pointed arcade which divides the nave from its aisles is tall, gracefully proportioned, and softly moulded in warm-coloured Cheshire stone. The lofty pointed chancel arch is spanned by a very rich, and richly decorated, rood-screen and loft. The upper surfaces of the walls of nave, chancel, and aisles are profusely painted with "diaper" patterns, in a revival of the fifteenth-century manner, which Messrs. Bodley and Garner made peculiarly their own. The general effect of the interior is ornate, and somewhat dim and mysterious; it is in many ways extremely characteristic of the views and tastes which stamp indelibly the united work of the next twenty years. It has intensely the sense of style, less archæological than personal. It exhibits a deliberate departure from the conventional method of contemporary "Gothicists" in the "later" manner, adopted for the screen, organ-case, and other furniture, which suggests the fifteenth rather than the fourteenth century. The invariable delight in colour, natural and applied, is apparent in the use of stone, woodwork, hangings, glass, pigments, and gilding. No detail has been overlooked; the finish is careful and minute. It is safe to say that in the enthusiastic, scholarly, and patient completion of every accessory, ceremonial or decorative, of a church interior Messrs. Bodley and Garner stood in the early "seventies" absolutely alone; and it is in a very large measure to their example that the greatly increased attention now bestowed throughout the country upon such accessories is due.

In 1872 Mr. Bodley married Minna Frances, daughter of Mr. Thomas Reavely, of Kinnersley Castle, in Herefordshire. He has left one son, Mr. George Hamilton Bodley.

The Tue Brook church was soon followed, and eclipsed, by two others, which still remain pre-eminent in character and prestige amongst the many subsequently designed by the same architects. These are the churches of the Holy Angels, at Hoar Cross, Staffordshire, and St. Augustine, at Pendlebury, near Manchester. They are nearly contemporary, the former begun in 1871, the latter in 1873. Though stamped with the impress of a kindred inspiration, both expressing the same lofty idealisation, and both marked by extreme refinement in detail, these

buildings are as different in form and character as the exigencies of site, requirements, and materials can make them.

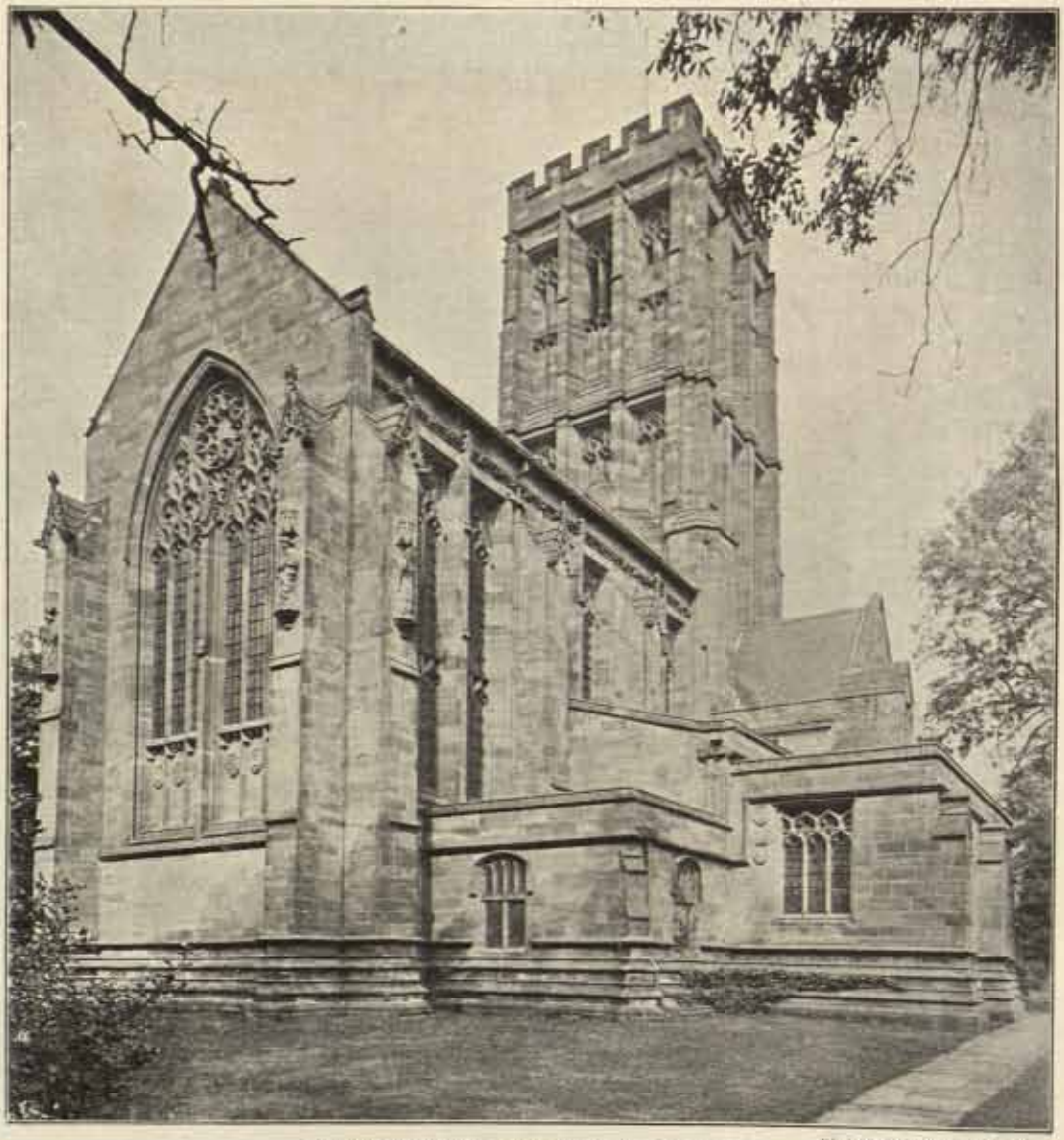
The church at Hoar Cross, built at the sole charge of Mrs. Meynell Ingram, as a memorial to



CHURCH OF THE HOLY ANGELS, HOAR CROSS: WEST END. *Photo. Bedwell, Worcester*

her husband, and at the gates of her park, is, with all its wealth of internal adornment, a village church, and intended for small congregations.

Standing close by the road, on the side of a beautiful valley, it lifts its massive square tower, strong in vertical emphasis and deep triple recession of each face, above its lofty chancel and less



CHURCH OF THE HOLY ANGELS, HOAR CROSS, FROM N.E. *Photo, E. Bridgeman, Lichfield.*

lofty nave, amidst the trees; and rises in the mellow harmony of its warm red sandstone from the level turf of a rural churchyard. Externally it fitly fills its place as the central feature of a scene that speaks intensely of England and the country. The quiet dignity of its proportions, the masterly handling and fine gradation of its tower, the perfect adjustment to its site, combine to give the whole design an effect of instinctive ease, the sheer inevitable quality that is, in all arts, the highest. Internally it is the fervid, almost passionate, realisation of an ideal. Seen,

as I last saw it, in the deepening twilight of a clear autumn evening, when the details of its interior are softening into gloom, and the chancel, with its stately altar, its sumptuous hangings, and its gleam of gold, is dimly visible beyond the screen, while the rich tones of its painted windows make a soft resplendent glow, it gives an indescribable impression of mediæval glamour, of poetry and mystery ; a visionary rehabilitation of the ancient glories of the Church.

The whole building is so harmoniously coherent, so obviously inspired by a single aim



CHURCH OF ST. AUGUSTINE, PENDLEBURY

Photo. Cyril Ellis.

and view, that it is difficult to credit its dual authorship ; yet the fabric is the result of the closely united work of the partners, who, however, concentrated their particular attention, in the design of the interior, upon individual parts. The nave is to a great extent Mr. Bodley's, while the chancel is chiefly Mr. Garner's work. Mr. Garner's also are the fine tomb, with its recumbent effigy of Mr. Meynell Ingram, and the rich stone panelling and decorative carving of the walls. To Mr. Bodley fell the care of the completion, that for the last few years of his life went on. A chapel was added on the north side, and the church was enriched by applied

decoration, glass, and furniture. It would be hard to find a church more completely and delicately designed and finished; the evidences of refined imagination, of studious thought, and loving care are everywhere. No detail has been overlooked; each contributes adequately to the general sum of beauty. In spite of its comparatively small scale, the church gives an impression of noble dignity which many a larger building lacks. It is not only a beautiful and pious memorial of the dead, but a monument alike to the devoted talent of its architects, and to the loyally bestowed and highly skilled workmanship of its builders.

For what it is, the fine flower, the sublimated essence of the Gothic Revival, it is wonderful. It is a complete acceptance of ancient forms, a tender and loving interpretation of an ancient manner. No difficult constructional problem was attempted; the plan has no complexities; it is simple, sheer and traditional, and yet, with all its abeyance to prescriptive rule, it is no

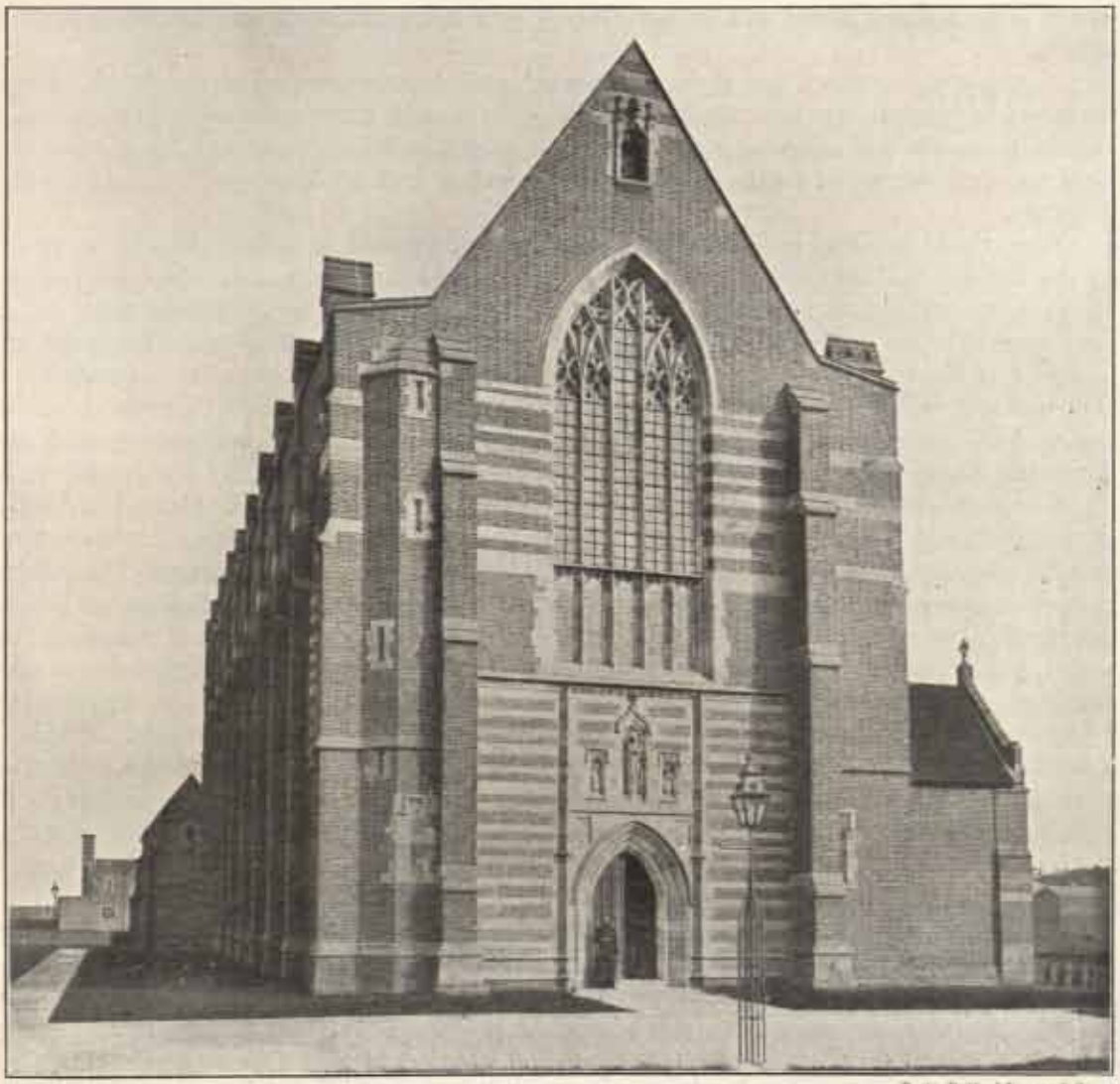


ST. AUGUSTINE'S, PENDLEBURY, FROM S.W.

archæological essay, no scholar's transcript of a definite original, but an inspired reincarnation of the spirit of the past.

Far other is the interest of St. Augustine's, Pendlebury. Akin in stateliness, in perfected refinement of detail, in quiet dignity of effect, it is, in plan, purpose, and constructive conception, as different from its contemporary as it well could be. It is situated upon a flat site amidst the unlovely cinderous surroundings of a Manchester suburb. Its walls are of brick, and stone is used for the dressed work of doors and windows, for columns, arches, and the decorative bands that add to the distinctive character of the exterior. The plan is a long parallelogram, embracing nave and chancel, without any structural division between them. The aisles are mere passages pierced through the deep internal buttresses that resist the thrust of the waggon-vaulted timber roof. The church is long, spacious, and lofty. The succession of tall piers with their slender engaged shafts, bearing softly moulded and finely proportioned arches, is most effective in the rhythmic sense of vertical emphasis which it gives. The noble sweep of the high roof, with its

repeated interspacings of light ribs, the perfect proportions and skilful placing of the great eastern window, the refined dexterity of the furnishing—screen, font, pulpit, and stalls—complete the intense impressiveness of an interior splendid in simplicity and inspiring in the stately lift of its noble lines. And if the form is fine, so is the ordered scheme of colouring, both constructive and applied; which is essentially characteristic of its authorship. The gently con-



Photo, Bedford Lemere & Co.

ST. AUGUSTINE'S, PENDLEBURY: WEST END.

trasted browns, greys, and creamy whites of the piers and arches, the soft rich tones of blue, green, and gold of the panelled wainscot of the aisles, the diapered painting of the chancel walls and the arched roof, the deep browns of the oakwork, and the mellow translucency of the stained glass, all contribute to a sum-total of decorative harmony which is as impressive as it is impossible of description.

Externally, studied proportions, simplicity of detail, concentration of ornament, and quiet emphasis of structural lines, enhance the scale, and give a rare effect of individual grandeur to a

building which, in clumsy hands, might so easily have been a mere gaunt brick mass in a smoky suburb. A striking external feature of the chancel is the convergence inwards of the north and south walls, which accounts for the termination of the passage aisles. This was, I believe, the first modern instance in England of the use of the pierced internal buttress. Mr. Street's church, All Saints', Clifton, which has this feature, was begun somewhat later. It is a thoroughly modern building, of frankly expressed construction, and if it were the sole instance of the united efforts of its authors would still be sufficient to give them distinction amongst their brother artists.

Flanking the southern side of the churchyard, and slightly eastward of the church, stands the school building, a large low range of red brick, quiet, simple, and proportionate, of a somewhat Flemish character, and affording in the contrast of its relatively humble scale and quasi-domestic form an admirable offset to the architectural aspiration and dominant bulk of the principal structure.

From the little school at Pendlebury to the municipal splendour of the School-Board offices on the Thames Embankment is a "far cry," and the contrast serves as an illustration of the varied tasks undertaken and versatility shown by their authors during the first ten years of their mutual labours. The latter building, begun in 1873, and standing on the Embankment just west of the Temple, was intended as a portion only of a final scheme. It has been since, unfortunately, completed by other architects. The river front is distinctly French in feeling, and that character, probably suggested by its environment, falls in not unpleasantly with the somewhat continental impression of the tree-lined highway that it faces.

It is built of brick, shown only in sparingly striped courses, with intermingled ashlar bands, on the front, and the imposing chimney stacks. The whole façade, in spite of its horizontal entablatures that mark the stories, presents a strong effect of vertical tendency. The slender pilasters and engaged columns, the tall, mullioned windows and their leaded panes, all add to this effect. It was pleasant in colour forty years ago, in its pristine newness ; it is pleasanter still to-day, when London has overlaid its Portland stone and bright red brick with her softening veneer of grime. Its high-pitched roof and tall pedimented and buttressed dormers complete the sense of graceful lift which gave it an extreme distinction amidst its neighbours. Within it is adroitly planned upon its narrow site, and contains a handsome board-room, and a number of committee rooms and offices. Quiet, distinguished-looking rooms, many of them provided with high, imposing chimney-pieces. In this instance I believe I am safe in saying that for the planning of the structure and the design of the river front Mr. Garner was mainly responsible, while Mr. Bodley devoted himself more especially to the decorative finish of the interior.

A couple of miles further west, and still upon the embanked river shore, is another building, this time purely domestic, by the same architects. River House stands on the Chelsea Embankment at the corner of Tite Street. It was completed in 1879, and is, though barely aspiring to the title of a mansion, a dignified and admirably proportioned dwelling-house, of sufficiently imposing dimensions. It is faced externally with buff-coloured stock bricks, while its window quoins, cornices, pediments, and string-courses are of gauged red brick. It is a staid and careful composition in the earliest eighteenth-century manner, a close and studied adaptation of the style of Queen Anne. Again, as in so much of their civil work, the design of the structure is chiefly due to the junior partner, while in the interior, with its fine sobriety of scholarly detail and quiet harmonies of decorative treatment, it is hard to say where Mr. Garner ended and Mr. Bodley began. Singleness of aim and taste, unity of sympathetic interest have imbued the building with a character intensely local and appropriate. River House is thoroughly a house of Chelsea, and does no discredit to its older neighbours of Cheyne Row.

Its plan is fairly simple, with a considerable, perhaps over liberal, allowance of windows,

generally commanding charming views, and with a fine central staircase in a square well lit from the octagonal lantern which crowns the roof. Though it is by no means a large house, it contains several rooms which in their excellence of proportion and masterly handling of detail make a far more imposing impression than a mere statement of their dimensions would suggest. The chimney-piece is ever the architectural focus of the room, and in every room this feature is individual and characteristic.

The limits of this Paper, if not those also of the patience of my audience, make it impossible to describe or illustrate more than a very few buildings of each class amongst the many that stand to the single or divided credit of the partners. But no indication of their mutual work would be complete without some notice of the collegiate work at Oxford and Cambridge, which has so greatly added to the high reputation achieved elsewhere.

In both cities they have done much. In Oxford, to give the usual precedence to the older University, they made their beginning, and their mark, at Christ Church, with their addition to the library, and the great tower that stands at the south-eastern corner of the principal quadrangle, known as Tom Quad, and rises over the well-known and splendid old staircase leading to the Hall, and which, with its slender central shaft and fan-traceried vaulting, is one of the prime architectural glories of Oxford.

Few things could better illustrate the fine adaptive instinct and sense of appropriateness shown by these gentlemen in their additions to old buildings, than their handling of this corner of a college quadrangle. It was no easy task to hit the happy mean of height and mass for a tower that should neither do hurt to the fine proportions of the Hall, nor lessen in effect the low spire of the Cathedral.

The strong, quiet, oblong mass is so thoroughly proportioned to its place, so thoroughly moulded to the ancient sub-structure upon which it stands in unobtrusive coherence, that it is readily accepted as an integral and imposing feature of the finest quadrangle in Oxford. The concentration of ornament in this design is very characteristic. The rich parapet and pierced angle-turrets are reserved as a crown to the broad, plain wall-spaces ; and decorative emphasis is given to the ancient portal below by the enriched panelling and triple niches, with statues of the founder, Cardinal Wolsey, and of two angels, which are placed above it.

It was the intention of the College and of its architects to complete the open cloister round the great quadrangle. This was originally intended by its early builders, and the arched wall ribs and moulded buttress bases still testify to an uncompleted scheme, abandoned, in Messrs. Bodley & Garner's case, through fear of darkening the ground-floor rooms.

In the little cathedral church, which is entered from this quadrangle, the very striking and typical reredos—of red stone, relieved with colour and gilding — is the design of Mr. Bodley.

This work at Christ Church was closely followed, and indeed overtaken, by another addition to another College, and the "Master's Lodge" at University College was built between the years 1876 and 1879, and is the dignified dwelling of the head of that society. It is, as an Oxford house should be, of stone, and is another and a striking instance of the talent for incorporation with old buildings, for the acceptance and assimilation of a dominant note, that characterised Messrs. Bodley & Garner. It is full of quaint dignity in the Elizabethan manner of the College—a manner in which Mr. Garner was peculiarly happy.

The scaffolding had barely been removed from the Master's Lodge when the foundations for a newer and larger building, this time at Magdalen College, were begun, in the year 1880. This, though now forming a conspicuous portion of the College, is an entirely new and distinct building. It is known as St. Swithin's Quadrangle, and was entrusted to Messrs. Bodley & Garner, after a competition, in which Messrs. G. E. Street and Basil Champneys of London, and Mr. Wilkinson

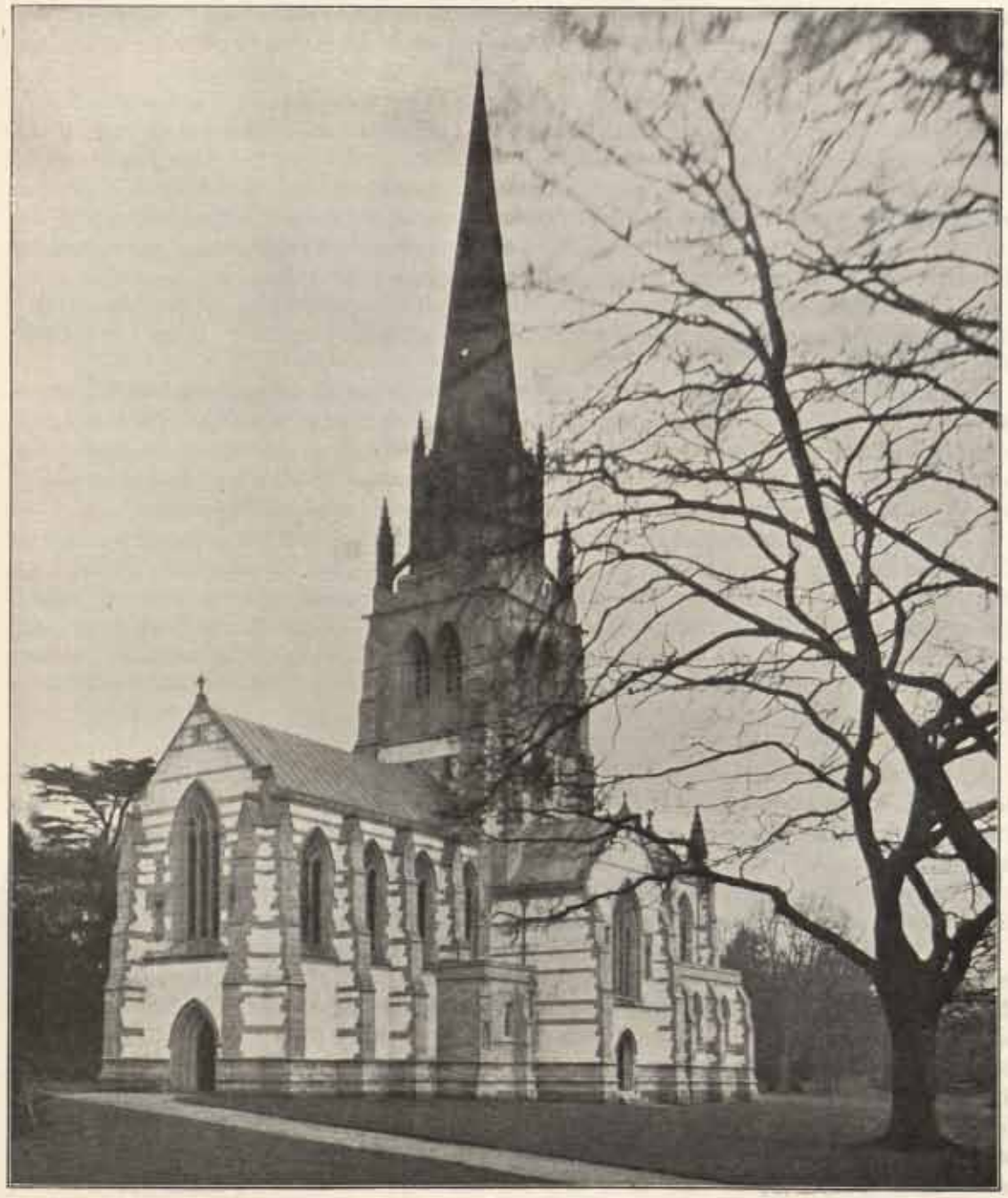
of Oxford took part. It consists of living-rooms for Fellows and undergraduates, and of lecture-rooms. The quadrangle has not yet been completed, the portion built being the southern side towards the High Street, the entrance tower, which marks the return of the eastern face, both shown in the accompanying photograph [p. 305], and a part of the western side. The entrance tower is connected by means of a tall wrought-iron fence, surmounting a low stone wall, with the excessively picturesque old Grammar Hall, thus enclosing the eastern end of the quadrangle.

The late fifteenth-century manner of the College has been frankly accepted, and Mr. Garner's studiously careful detail shows a close assimilation to the character of the adjacent buildings of St. John's Quadrangle, of which indeed, some eight years later, he completed the northern side by the wing known as the President's Lodgings. This replaced a poorly built and repeatedly altered house, which bore the same title, and its quiet, unostentatious front faces the incomer by the Porter's Lodge, across the trim Oxonian grass plot, and fitly encloses the beautiful little quadrangle which forms the entrance court of the noble old college. If, at Oxford, Mr. Garner bore the lion's share of the work accredited to the partnership, Mr. Bodley redressed the balance at Cambridge, and at Oxford is responsible for a fine non-collegiate building, notice of which I propose to reserve for the end of my Paper, in the Church of St. John the Evangelist, in the suburb of Cowley.

At Cambridge, Mr. Bodley added new and distinct buildings to two colleges—" King's " and " Queens' " ; at the former he has placed, on the river front, facing the " Backs," the incomplete quadrangle known as Bodley's Buildings. Built of the pleasant-looking, buff-coloured Ketton stone, roofed with grey stone slates, planned with the traditional sequence of staircases, carefully studied in proportion, and delicately and characteristically refined in every detail ; this building, even in the inevitable newness of its early years, forms an harmonious adjunct to a college of exceptional dignity and importance. At Queens' College Mr. Bodley is responsible for the new red-brick chapel, a tall, somewhat severe building of an unpretentious character, the asceticism of whose lofty interior is tempered by the rich colouring of the vaulted ceiling and the altar piece, and by the glow of Kempe's glass which fills many of the windows.

So far I have followed a roughly accurate chronology in the description of buildings, with, however, a flagrant departure in the case of King's College, where Bodley's Buildings should, in strict order, be attributed to the last decade. That between the years 1870 and 1880 produced many designs beside those already alluded to, and amongst them those of two cathedrals—one the unsuccessful competitive design for Truro, and the other that for the cathedral church of Hobart Town, Tasmania, which has been carried out, and is a candidly English design in the typical manner of its authors. 1880 saw the beginning of the Church of St. Michael, Camden Town, London, mainly attributable, I think, to Mr. Garner. The period between 1880 and 1885 was a busy one for the partners, and one of the most striking and successful of their mutual achievements, the church of St. Germain, at Cardiff, in South Wales, belongs to it. This was a work of close collaboration, and is marked by such an apparent singleness of intention and unity of handling, that only the most perfectly initiated of observers could allot to either partner his individual share in the design. There is a breadth of treatment, a spaciousness, an intrinsic grace about St. Germain's Church which places it very high amongst the many fine creations of this order which we owe to Messrs. Bodley & Garner. It is simple, sheer, and unaffected. It rises to a noble height, sustained by the slim adequacy of its clustered columns, and is ceiled by the perfectly adjusted curves of its wooden waggon-vault. The chancel ceiling is divided into three bays by stone arches ; that of the nave is merely interspaced by means of wooden ribs. The organ loft, with its traceried openings to the southern aisle, is an effective part of the internal design, and the dignified ingenuity of the great east window, with its double tracery, provides a focus to the fine distinction of the eastward view. St. Germain's is of tall proportions, but comparatively

restricted by the site in length of nave. Its building was closely followed by that of another church in Cardiff—that of St. Saviour's, designed by Mr. Bodley—in a manner of extreme contrast. It is very long and low, and the effect of its length is increased by the inward inclination on plan of the chancel walls. It is full of character and has a dignity of its own, but makes no attempt to vie in scale or impressiveness with its stately sister.



CHURCH OF ST. MARY, CLUMBER, FROM S.W. *Photo. Cyril Ellis.*

1886 brought Mr. Bodley an opportunity in many ways similar to that offered by Hoar Cross. This was the new church designed by him for the Duke of Newcastle at Clumber, near Worksop. Like that at Hoar Cross, the Clumber Church is small, stone-built, of simple traditional plan, and very solidly constructed. Like Hoar Cross, it has a central tower, but it has the additional feature of a stone spire. It rises from the even lawn, which slopes southward to a beautiful little lake, against a charming woodland background. It is faced externally with the white stone of a former and demolished building, while the upper portion of the tower, the spire, the buttress faces, copings, tracery and dressed work of doors and windows, are of a warm red stone.

The church is very similar in style and feeling to its Staffordshire rival; externally, if anything rather plainer, and with distinctly less emphasis of vertical line, it conveys an equal if not greater sense of easy security and instinctive proportion. It bears the same impression of studied mastery, of poetic inspiration, of care, thought and conviction. Internally its high nave and chancel are roofed with groined stone vaulting, and the red stone is carried throughout the whole of the admirable masonry. Less ornate, less sumptuous in detail of fitting and furnishing than Hoar Cross, the interior is still excessively striking and impressive.

Externally, the graduated spread of the boldly weathered buttresses, and the "battering" lines of the handsome steeple, give a gratifying sense of ample resistance, of permanent and assured stability.

Clumber Church indicates a point of departure, a cessation of the real collaboration of the partners. For several years before the actual severance of the tie, it had become practically nominal, and though intimately friendly and sympathetic, had ceased to have its former significance of close co-operation, of interdependence, and of mutual contribution to a mutual result; each partner worked singly upon a given design with bare consultation of the other.

For the sake of clearness it is, therefore, better to deal henceforward with their work as that of independent artists, influenced, indeed, as such intelligences must inevitably be, by a long course of associated labours, but performing each his individual tasks in virtual separation. The actual cessation of partnership came in 1898, by the friendly dissolution of a friendly bond —there had never been any deed or legal document of any kind—and the quondam partners continued their dissociated labours side by side in the two old sets of chambers on the first floor of No. 7 Gray's Inn Square.

THE FINAL PERIOD.

I take Clumber Church as marking the beginning of this period, though one or two previous designs which bore the names of both partners were just as absolutely the work of one of them. The great marble reredos in St. Paul's Cathedral, which is so well known as to need no description, was, for instance, absolutely Mr. Garner's.

The competitive design for Liverpool Cathedral, a competition in which no award was ever made, was also Mr. Garner's in actual conception and elaboration.

The ten years between 1885 and 1895 saw at least as many new churches, large and small, in town and country, begun and completed by Mr. Bodley. Eckenswell, Horbury, Skelmanthorpe, Warrington and Danehill, are all small churches, the last of singular beauty and perfect adaptation to its site on a Sussex hilltop; Epping, Hackney Wick, Norwood, Branksome, Bournemouth, and Cowley, Oxford, all town or suburban churches, are of considerable size as churches go in England. Of these the first three show a certain similarity of type and a coincidence of features strongly characteristic of Mr. Bodley's later manner. All three have no chancel arch, and comparatively low and wide naves, "lean-to" aisle roofs, and tall stone arcades carried nearly up to the roof-plates. All three have no clerestory, but are lit from the aisle windows, and those of the eastern and western walls; all have round barrel-vaulted ceilings, divided by

ribs and decorated in the architect's familiar manner, in soft, rich colours, with painted texts in Gothic type running horizontally above the cornice ; and finally all three have flush end walls, divided only by buttresses.

The Eton Mission Church interior is impressive in its quiet plainness, in the admirable



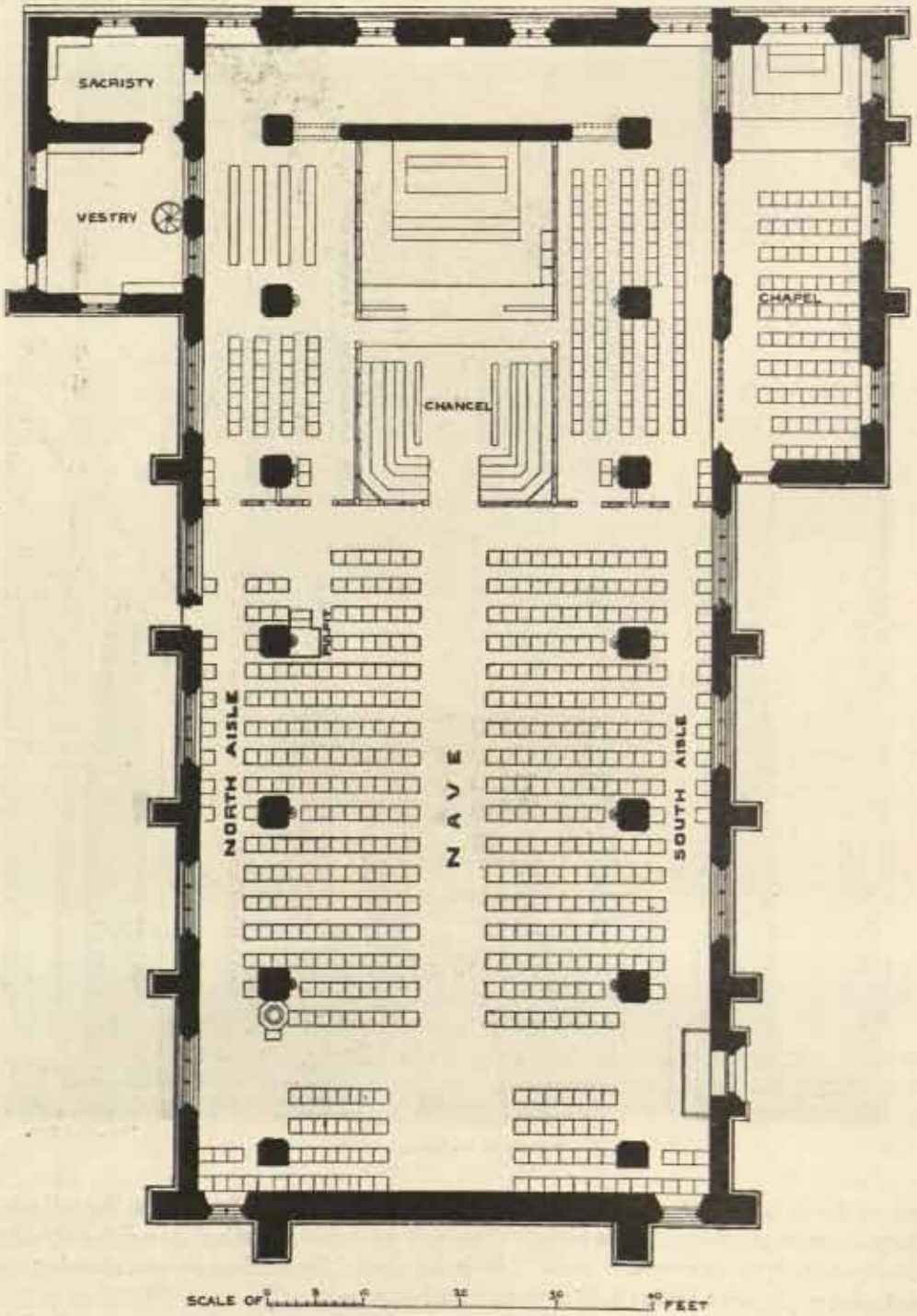
Photo. Cyril Ellis.

CHURCH OF ST. MARY, CLUMBER.

spacing of its great square piers with their slender springing shafts, and in the adjustment of the lofty transverse arches of the aisles. There is an effect of effortless originality about the whole which tells of the master hand. It is an essentially modern design, showing, amongst other things, what can be done with a mere parallelogram.

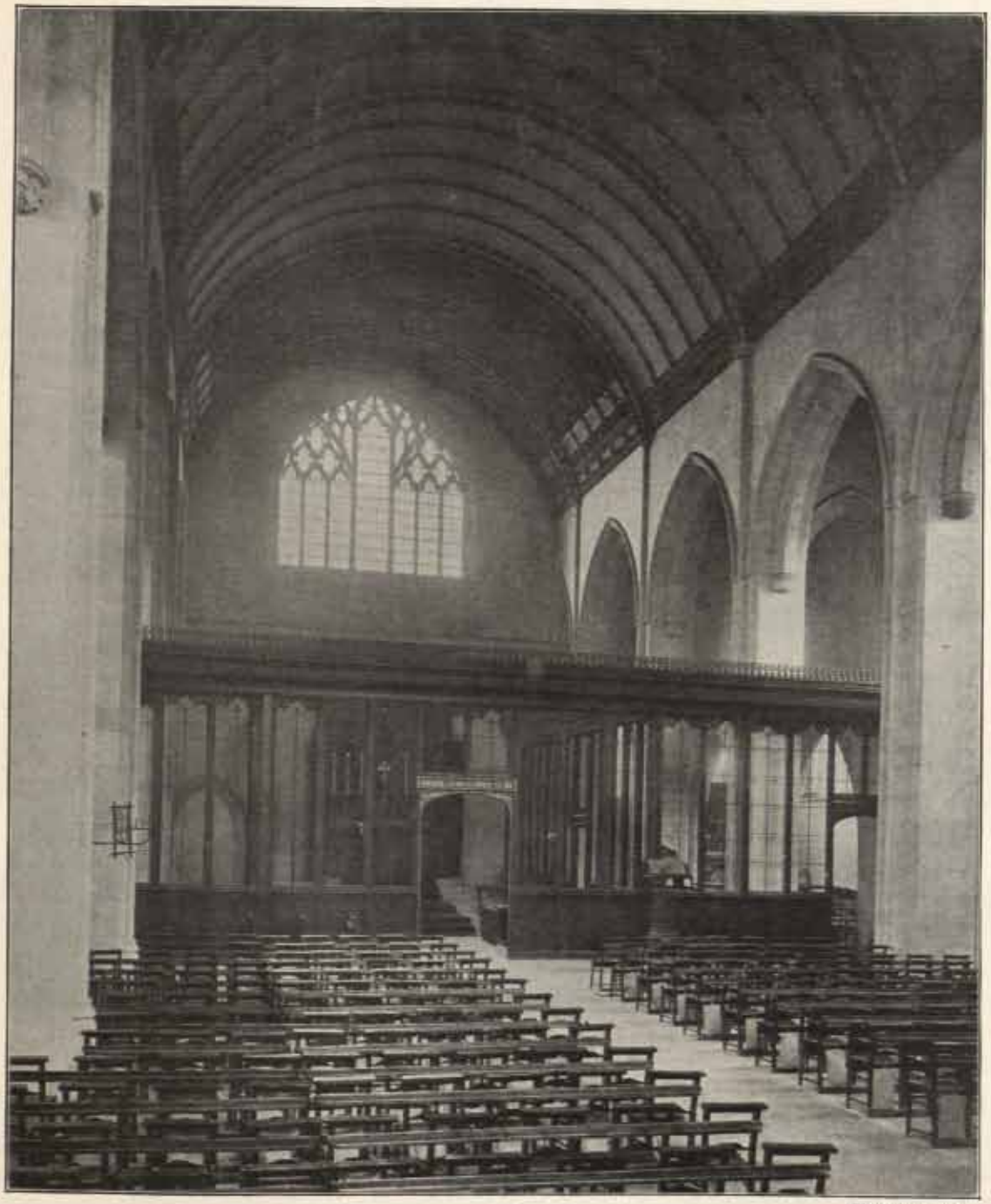
The Church of St. Aldhelm at Branksome, on the outskirts of Bournemouth, internally

somewhat resembles the Norwood Church, but its nave roof is of the open trussed-rafter order, the eastern portion only being ceiled. Its chief ornaments are the long, low oak screens of the chancel and its aisles, and the rood which surmounts that of the former.



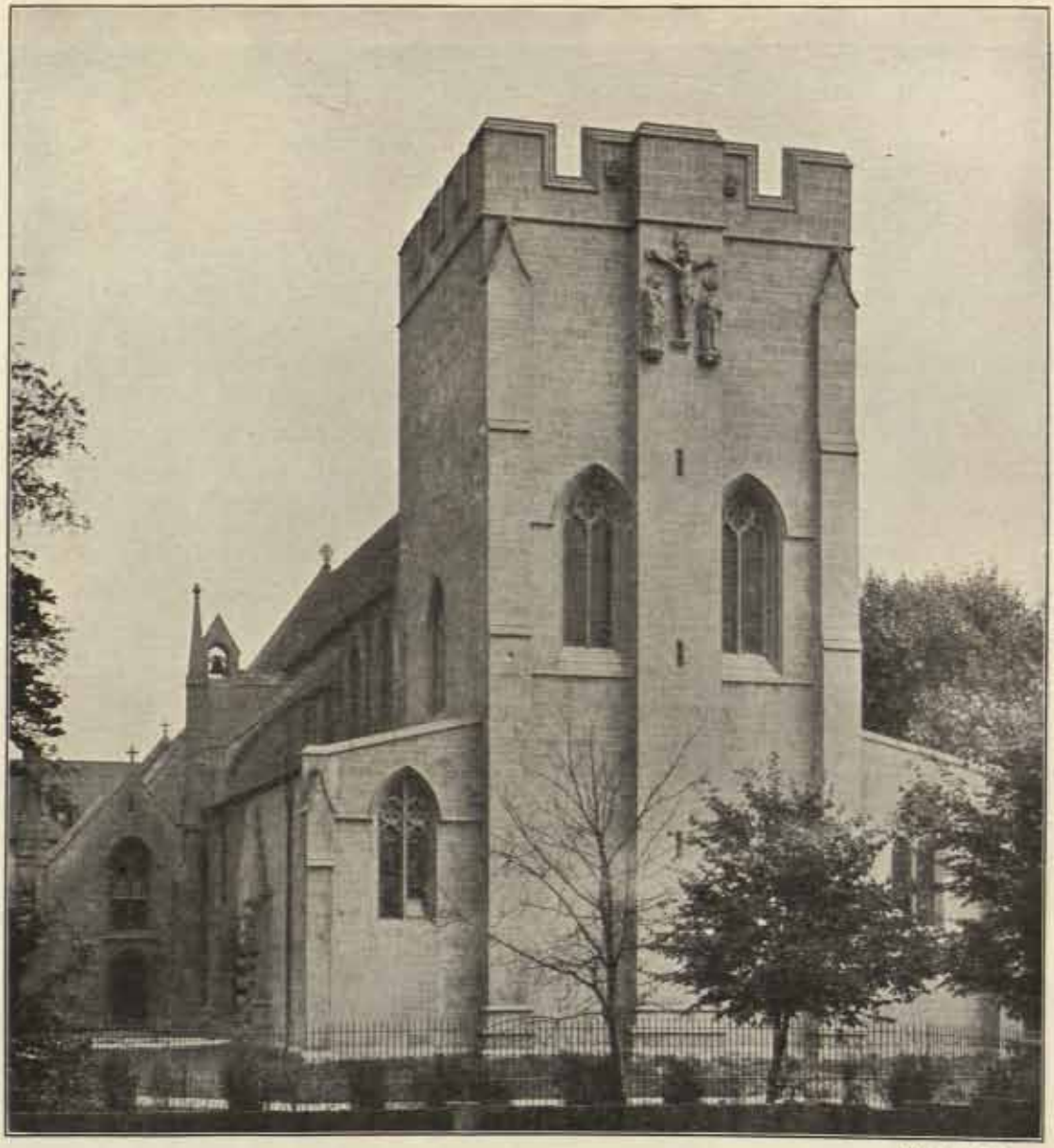
CHURCH OF THE ETON MISSION, HACKNEY WICK.

The Church of Cowley St. John, at Oxford, stands alone in treatment and intention. It is a monastic church, built for the use of the Cowley confraternity. The long chancel, screened from the relatively short nave, is for the use of the fathers and brethren of the Order. The public is admitted to the body of the church. The austere dignity and ordered reticence of its high



CHURCH OF THE ETON MISSION, HACKNEY WICK. (MESSRS. BODLEY AND GARNER, ARCHITECTS.) Photo. *Cyril Ellis.*

white interior give to this church a peculiar distinction—a calm severity, well befitting its use. The western end of the exterior, shown in the accompanying photograph, rises above the monastic garden. Along the southern and eastern walls runs a low flat-roofed building containing a



CHURCH OF ST. JOHN THE EVANGELIST, COWLEY, OXFORD: FROM THE WEST. *Photo. Cyril Ellis.*

cloister and vestries. The northern side is flanked by a chapel and a music school or practice room for choristers.

The church at Danehill is small and of singular beauty and perfect adaptation to its site upon a low hilltop of Sussex. It shows the usual high finish, the bestowal of thought and care upon every detail. It is very completely fitted, and furnished with screen, stalls, and stained

glass, and is essentially an English country church upon traditional lines, with aisles of unequal width, and low south chancel-aisle, rood turret, square western belfry tower, and southern porch, faced with Sussex stone, and roofed with Horsham stone tiles.



Photo. Cyril Ellis.

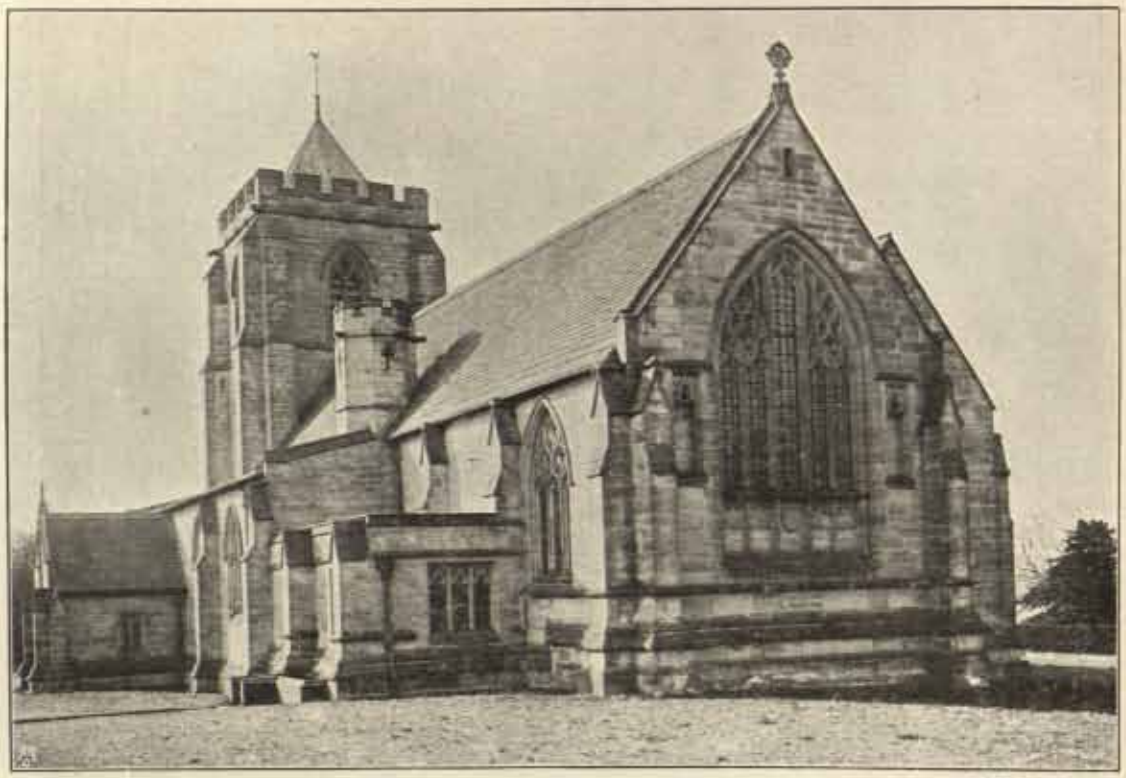
CHURCH OF ST. JOHN THE EVANGELIST, COWLEY, OXFORD.

In marked contrast to such sheer creation is Mr. Bodley's skilful and recent adaptation of a large secular hall, which he has converted into a church for the English community at Florence.

It is one of the constant experiences, of course, of all busy architects, to have to deal with conversions and alterations of existing buildings, and to Mr. Bodley there fell a large share of such tasks. He was frequently employed upon the repair and readornment of old churches,

or the more or less complete alteration of modern ones. In regard to the former, he hated "restoration" of the fabric, and generally confined himself to mere repairs, and to complete furnishing of the interior. He handled old buildings lovingly. As an instance of his dealing with an ancient parish church, I may mention Hickleton Church, where he put in screens, a rood-beam and rood, and a monument with recumbent effigy.

With a modern church—of the early nineteenth-century Gothic type—I cannot say that he was tender, though he respected anything that he felt to have good architectural character. Some of his conversions, or "transmogrifications" if I may use that expression, are remarkable. The late Mr. J. T. Micklethwaite said of him to myself "Bodley's the only man I know that can and does make a silk purse out of a sow's ear." I will offer you, as instances of conversions



CHURCH OF ALL SAINTS, DANEHILL, SUSSEX, FROM S.E. *Photo Cyril Ellis.*

of modern buildings, the churches of St. Paul, Knightsbridge, and of Wimborne St. Giles' in Dorset, unfortunately recently burnt down.

In ecclesiastical work Mr. Bodley adhered, wherever and whenever possible, to his own version of the Gothic manner; but in civil or domestic work, except in the modified forms of Gothic which he felt to be appropriate to Collegiate buildings, he worked always in equally personal and varied versions of the types of the English Renaissance. I shall have something to say presently about the various houses he lived in and arranged to his liking, but he altered and decorated a very large number of private houses. He was indeed a consummate decorator, and, in church or chapel, house or hall, worked always with deft originality, and always towards a certain ideal, an ultimate vision of harmonious colouring, of high splendour, or homely contrasts, as the case might be. There are instances, though relatively few, I think, of his use, where he felt it to be appropriate, of the Renaissance manner for ecclesiastical work,

as in the private chapels of great houses. One of these cases of adaptation, and, as I think, a typically dignified and happy one, is that of the private chapel for Lord Halifax.

His strong leaning, however, was always towards Gothic. It was a matter of faith, of profound personal conviction, a conviction which strengthened and deepened with advancing years, and in which, to the end of his long life, he never wavered. His later designs all show the intensity of this conviction. I must now deal somewhat rapidly with these concluding instances, conspicuous amongst which is the church of St. Mary at Eccleston, built for the Duke of Westminster. In this church he used the red Runcorn sandstone, in which



BICKLETON CHURCH, DONCASTER. (MESSRS. BODLEY AND GARNER, ARCHITECTS.)

he delighted, and of which the warm colouring formed the keynote of the internal decorative scheme. Less inspired, and therefore less inspiring, I think, than his earlier work, such as the churches of Pendlebury, Hoar Cross, or Clumber, stiffer and more formal of line, colder of aspect, St. Mary's, Eccleston, is characteristic of the later manner. It still shows, however, vigorous and proportionate planning, and the high perfection of skilful detail. In the church of Holbeck, near Leeds, we find the same qualities pervading a simpler building and of lesser scale. The screen at Holbeck is extremely typical of this later period in its length and constructive disposition.

The church of All Souls, Leicester, is a good instance of the latest period, showing a simple severity and economy of effect, relieved by sparse and well-adjusted ornament in moulding and carving. It is a cheap church, but shows the invariable care and thought in all its details.

x x

An interesting little building which belongs to the late, almost the latest, period is the Wayside Chapel at Woodlands, in Dorset, with its twin naves divided by a central arcade,



HOLY TRINITY, KENSINGTON, FROM S.W.

and its steep-pitched roof. It was always characteristic of Mr. Bodley to spend as minute care upon the humblest as upon the greatest of his opportunities, and upon the most minute details of either.

One of his last churches, I believe the very last upon any considerable scale, is a London

church, that of the Holy Trinity, Kensington. This is a lofty building of simple character, in which there is an evident intention to rely greatly for effect upon the perspective of tall slim columns and the oblique rather than the direct or axial vista. The site is a short one, and therefore no extensive west to east vista was possible. The extreme slimness, the attenuation of detail in this church are extremely symptomatic of his final manner, and I think a critical mind will find this quality carried to excess in much of his late work. It is impossible fully to explain or understand the influences leading to the ultimate crystallisation of an individual style in any art, but in



ST. EDWARD'S, HOLBECK.

Mr. Bodley's case, I fancy that the increasing thinness of effect in his last work was, at any rate partly, due to the fact that his increasing infirmities made visits to his buildings, while in progress or when completed, more difficult and therefore less frequent, and that he grew instinctively to rely more than formerly upon drawings, and began to realise less acutely their ultimate effect.

Great honours and great opportunities came to him very late in life. One of the greatest opportunities indeed, the more is the pity, close at the end. In 1906, the year before that of his death, came the remarkable evidence of American appreciation in the commission to design the cathedral for Washington, in conjunction with his old friend and former assistant Henry Vaughan of Boston. This was quickly followed by the placing of another American cathedral, that of San Francisco, in his hands. In the autumn of 1906 he journeyed out with Mr. Cecil Hare, his friend,

assistant, and ultimately his partner, to the United States to inspect the sites of the two great churches, and to make preliminary arrangements. Upon his return to England, and while employed upon yet another remote cathedral—in India—he at once began the designs for Washington and San Francisco. He was much hampered by ill-health in the spring of the following year, but managed nevertheless to complete his designs, working to a great extent in the beautiful old stone manor house of Water Eaton, near Oxford, which he had taken in 1906, and where he was to end his days. He was destined never to witness even the actual beginning of the American buildings, but left the drawings in a well-advanced stage of preparation. The United States had done him previous honour by bestowing upon him the gold medal of the American Institute. A similar honour was done him in 1899 by this society, for in that year he received from the hands of the President, in this room, the Royal Gold Medal. He was elected Associate of the Royal Academy in 1882, and full Academician in 1902. In the summer of 1907 he received from the University of Oxford an honour which he greatly valued, that of the honorary degree of Doctor of Civil Law. I was present at the Encaenia in Wren's Sheldonian Theatre, and was greatly concerned to notice how pale and ill he looked in the imposing red robes as he took his seat amongst his fellow doctors. The end was not far off. Through the remainder of the summer and the early autumn, and in spite of recurring intervals of illness, he steadily continued his work, being chiefly I think engaged upon Washington Cathedral, for which he made many notes and sketches in bed. He retained his full vigour of mind, the full force of his imagination, his patience and his kindly humour to the last. He died suddenly and peacefully in the early morning of Monday the 21st October, in the old house that he had grown to love. One of his last, if not the very last, designs has a pathetic interest: it was that of the sepulchral monument to his old friend and partner Mr. Thomas Garner, whom he had outlived by some eighteen months.

You will not expect from me, his old pupil and, I am honoured in being able to say, his friend for so many years, a critical estimate of his work or his abilities, and I must acknowledge that this Paper is in the nature of an appreciation rather than a critical essay. If I have erred in overestimation, if you think that I have in any degree overstated my master's claims, you will remember that he *was* my master, and will I know make every allowance to the natural bias of loyalty, to the natural partiality of a friend. His name, however, needs little commendation from me. His monument is his work, his epitaph the record of a long, honourable, and arduous life.

No just estimate of his character or attainments could be formed without intimate acquaintance, and he was not easy to know. Retiring and indeed somewhat shy, self-contained and introspective, his external manner, albeit invariably courteous to all alike, was frequently somewhat aloof and apt to impress strangers as reserved and rather cold. He did not as a rule make friends easily or quickly, but once made he retained them, and their number was not a few. To his pupils and assistants, and he had many during the latter half of his life, he was delightfully friendly and inspired admiration and respect in all, and in those who knew him best the warmest affection. The list is long; one of his earliest pupils was Professor Simpson, to whose admirable article in the JOURNAL of 11th January 1908, and to whose kindly assistance in the provision of photographs for this Paper, I am highly indebted. Another was Henry Skipworth, destined not to outlive his master. Others were Mr. J. N. Comper, Mr. C. R. Ashbee, and Mr. F. Inigo Thomas. Mr. Lorimer, of Edinburgh, was with him for a short time. His head assistant, when I entered his office in 1880, was Henry Vaughan, now in full practice at Boston, and well known as a church architect in the United States. A subsequent head assistant for many years was Mr. Walter Tapper, now *inter alia* architect in charge of York Minster, succeeding in this office his master, who at the time of his death had the charge of that cathedral, as well as those of Peterborough and Southwark. To his intimates, to those with whom he was in real sympathy, he was delightfully open and indeed expansive at moments, full of kindly humour and

fun, a charming host, extending charming hospitality to his guests, loving a good story, a good rubber of whist, and a good cigar; loving above all music and song. He was an ardent musician, and an accomplished pianist, playing with intense delicacy and feeling the old melodies he preferred, or occasionally his own compositions. Music he placed above all arts, and used sometimes to say that he wished he could have devoted his life to it. His love of colour and his fine instinct for its employment and distribution were almost phenomenal. In his own home, or homes, for I have known him in many houses, he was always surrounded by fine hangings, stately old furniture, old tapestries, pictures, rare old china, mostly blue and white oriental, silver, and glass. He was



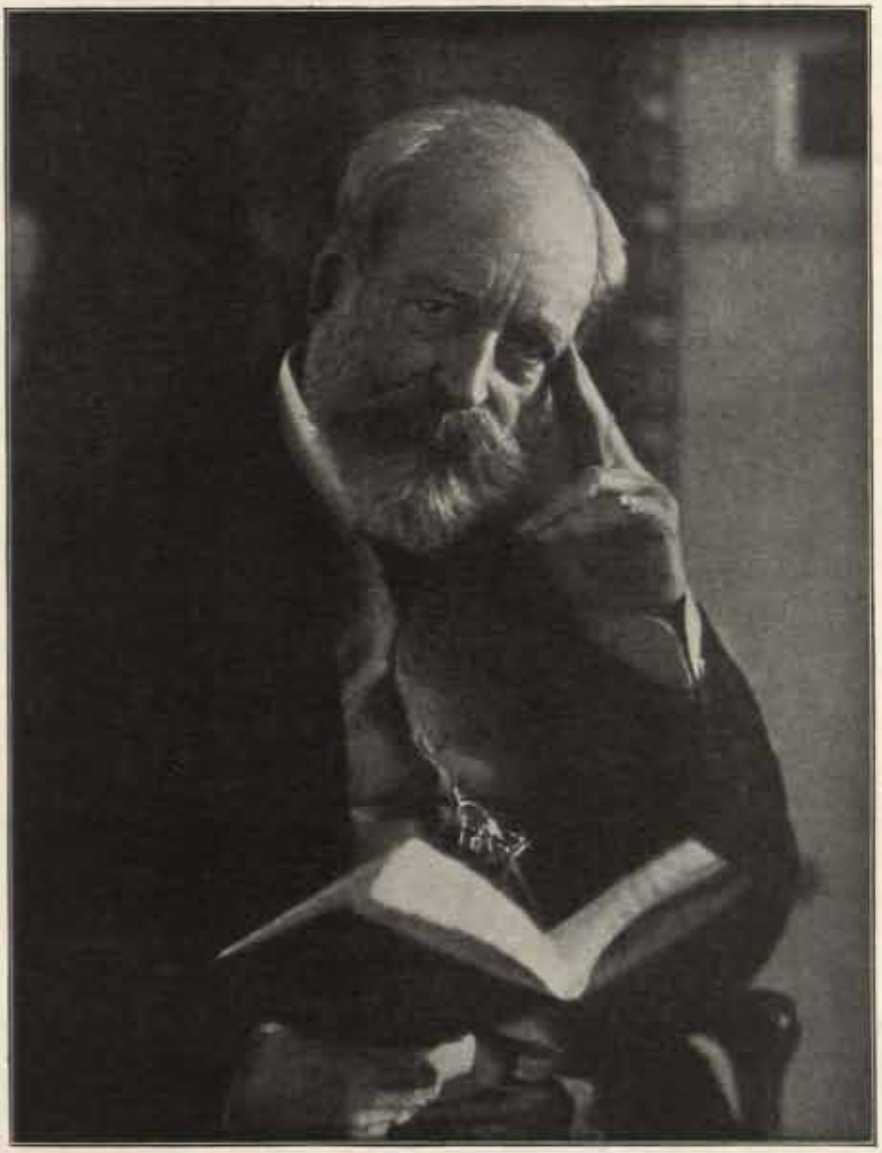
CHURCH OF ST. JOHN THE BAPTIST, THE BROOK.

fastidious in such things, and could understand no comfort without comfort for the eyes. He loved his house and perhaps still more his garden. A certain stateliness of surroundings was ever part of his natural appanage, and seemed becoming to his stately personality; his handsome face, lofty forehead and large dark eyes, grave in repose, but lighting up in greeting to a friend, or twinkling with fun when a joke was imminent.

The manner of his house was an intensely personal affair; indeed it was part of his personal manner, and that, in his work or in his play, at home or abroad, was ever the grand manner. He expressed himself admirably in writing, tersely, humorously, and amusingly in his friendly letters; his actual handwriting was picturesque and characteristic rather than legible. He

wrote with great facility, but did not like the task of writing. Ready, expressive, and apt in conversation, and frequently witty, he was a diffident speaker in public, and shrank from all public speaking. He filled, however, the office of Prime Warden of the Fishmongers' Company, presiding with graceful dignity at many feasts. Functions and public ceremonies he hated, and always carefully avoided all "inaugurations" and foundation-stone layings. His conspicuous professional success owed nothing to business habits, it was won in spite of their default, for a worse man of business in the usual sense it would be impossible to find. He detested accounts and kept none; he detested business letters, and frequently delayed answers to important communications—when he answered at all—for weeks or months. If a client became bothersome, he got no answers to any written communication; if he called in a rage, he was received with unruffled courtesy, and generally bowed out smiling and happy in a quarter of an hour. Mr. Bodley was not only a master of his art but excessively masterful; he permitted nothing, nor nobody, to interfere with his intentions. In the carrying out of a design he had set his heart on he was obstinate, nay obdurate, and he always ended by getting his own way in the long run—and the run was sometimes a matter of years. He has been called a copyist. Nothing could be farther from the truth. Except occasionally in minor details, he never copied. He possessed remarkably few architectural books; his professional library, indeed, would have been modest for a beginner. As I have said, he had assimilated and made his own certain architectural phases, he had seen and studied many buildings, and his derivations from those sources were prompted and refreshed almost entirely by his marvellously accurate and retentive memory, a memory the like of which I have never met in anyone else. In his youth, even during his pupilage, he had sketched but little, in spite of constant urging; in his later years not at all. His method of studying an old building was, as regards the exterior, to borrow a chair, which he carried from point to point of view, during the contemplative smoking of a cigar; when the cigar was out, he went inside, and, minus the tobacco, continued the contemplation. Yet he would remember the building, even to its details, for the rest of his life. I have myself tested this faculty in respect of a French church which I had seen a fortnight before, and had sketched, and which he had seen twenty-five years before. I am ashamed to say that he remembered it more accurately and minutely than I did, and put me right on several points. He would never make any written note of an engagement, but I never heard of his forgetting one. I have heard it confidently stated that he could not draw—a most absurd statement. He regarded drawing for an architect as solely a means to a definite end—the realisation of his design; and to that end his drawing was always adequate. For neat and finished drawings he had small regard, and no patience in his later years for their preparation; but his planning was quick and accurate, and his sureness and rapid facility in detail-drawing were astonishing. His little explanatory sketches, rough though they were, were always vividly graphic. His first notes of his various conceptions for a plan, or some large detail, were made anyhow and anywhere—in bed, in the train, in an hotel, at his club, or in his garden, and on anything handy—the back of a letter, an advertisement card, or the margin of a newspaper. He sketched in his cheque book, and is known to have filled his bank pass-book with notes and sketches. He had an extraordinarily fine sense for curves, and hated a weak or a flabby one. "Keep them nervous," he told one. His injunctions to his staff were always in the direction of refinement and restraint. "Learn to leave out. A young architect's india-rubber is more important than his pencil," he once said to me; and again, of window tracery, "It's not the shapes you make, but the shapes you leave, that matter." Of drawing generally, as applied to architecture, he used to say that we all draw too much; and that with one vernacular style, and workmen who understood it, hardly any drawing would be necessary.

He was extremely ingenious and resourceful, but disliked obvious ingenuity in design, and



GEORGE FREDERICK BODLEY.

indeed avoided it; his work, whatever else may be thought of it, has ever the effortless, inevitable look of quiet surety. His aim was never to startle, he never "played to the gallery," or tried to outrival others. In placing a building in a street, or in contiguity to others, he was always careful to do no hurt to its environment. "You must consider your neighbours," he said, "you've got to be a gentleman in your art."

His influence, I believe, has been wide and deep; it was apparent in the case of many of his younger contemporaries, such as G. G. Scott, J. Bentley, and Sedding, all of whom he outlived; as, indeed, he outlived most of his own real contemporaries. As was all but inevitable, in his old age he dropped somewhat out of touch and sympathy with modern tendencies. He was a pioneer, and if he survived his period and ignored the current phases of his later days, we can accept him gladly as such and recognise the steady purpose and fine achievements of his long and honourable career.

He never faltered from his ideals; he had ever the courage of his opinions; his enthusiasm and his energy endured to the end. At an age when most of us would seek repose, and though cruelly hampered by infirmities, he still worked on strenuously and gladly, happy in his power, happy in his long life's work, to the end that came so swiftly and peacefully, finding him alert, with cheerful, undimmed mind, full of years and of honours.

Prospice.

Shall I look back across the darkening sea?
Shall I not onward gaze? What though my sail,
Languid and lone, may hang all listlessly,
Shall I look back? Faint heart, for what avail?
Shall I not onward, eastward gaze? Kind wind
May waft me, and, at Dawn, the Haven I may find.

G. F. Bodley.

DISCUSSION OF MR. WARREN'S PAPER.

Mr. Ernest George, A.R.A., *President*, in the Chair.

At the conclusion of Mr. Warren's Paper, the Secretary read the following letter from Lord Halifax, dated the 13th February:—

Sir,—I have to thank you for the copy of the Paper Mr. Warren is to read to-morrow and at the same time to ask you to express to the members my great regret at my inability to attend the meeting of the Royal Institute. On the same evening I am unfortunately detained in the country and am prevented thereby from accepting an invitation which otherwise I should have had the greatest pleasure in accepting.—I am,

Yours faithfully,

Halifax.

The Secretary also read a letter from Professor F. M. Simpson [*F.*], who had been sent an advance proof of the Paper, but who was prevented from attending the Meeting owing to an attack of influenza. The following is an extract from his letter:—

Mr. Warren's Paper is so complete, and his appreciation of our old master's work so happily and sympathetically expressed, that little or nothing is left to be said.

One or two minor details occur to me. Mr. Bodley was, I believe, Sir Gilbert Scott's first pupil at the time when, I have always understood, Street was his assistant. The number of Scott's pupils was very great, and it would be interesting if somebody would compile and publish a complete list. His two sons, George Gilbert and Mr. John Oldrid Scott, Bodley, Garner, J. J. Stevenson, Micklethwaite, Johnson of Newcastle, Ferguson

of Carlisle, Austin of Lancaster, Mr. Hodgson Fowler of Durham—the four men who five-and-twenty years ago practically divided the work of the North between them—Mr. Somers Clarke and Mr. T. G. Jackson, if I remember rightly, were all pupils of his.

Mr. Warren mentions the low but bulky tower in the corner of the Tom Quad, Christ Church, Oxford. This was designed to carry a lead-covered wood lantern somewhat on the lines, but not a copy, of the one on the top of the belfry at Calais. The lantern is shown on some of the original drawings and also in a water-colour perspective made by W. H. Brewer. The intention accounts for the lofty proportions of the angle turrets of the tower, which rise above its parapet, and appear, in consequence of the omission of the central feature, too high—or so Bodley always said.

Mr. Warren makes a slip in saying that "no award was ever made" in the first Liverpool Cathedral competition. Sir William Emerson's design was placed first and Mr. James Brooks's second. I can cordially endorse his remarks about Mr. Bodley's letters. They were always delightful. I am reminded of one as I write now from my little cottage in Sussex, a mile and a half away from Danehill Church. I wrote Mr. Bodley and said I had planned it so that as I entered the front door and looked across the hall through the garden door, the centre of the view was his church. His reply was characteristic: "I like to feel that you will think of me in your going out and in your coming in." The interior of this church, with its organ on the chancel screen, is delightful.

As Mr. Warren says, Bodley was not business-like. He would keep clients waiting for months. Years ago, when I was measuring up the curious chancel arch-screen in Great Bardfield Church, Essex, the clergyman told me that he had been waiting for a design for a reredos he had asked Bodley to make for considerably over a year. I mentioned this when I returned to town, but no design was sent during the six months or more that I remained in the office.

Mr. G. H. FELLOWES-PRYNNE [*F.*], rising at the invitation of the President, said: It is with great diffidence, and at the same time with much pleasure, that I rise to propose a vote of thanks to my friend Mr. Edward Warren for his admirable Paper upon the life and work of George Frederick Bodley—with diffidence because of being asked at the last moment to perform this pleasant duty, and because there are so many who would have done it so much better than myself—and yet pleasure because of the obvious sincerity of the writer, and the evident sympathy Mr. Warren has with the subject of his Paper. There is, I think, no one who is suited to write such a Paper better than Mr. Warren, and I feel sure that we have all listened with interest to his almost poetic review of the life and work of one who was so long held in such high esteem in the profession, and none present who have not felt touched by the almost pathetic history of that life as set forth by a loyal and devoted pupil. From the many beautiful buildings erected, from the exquisite charm and proportion of his churches, from the delicacy of his details, from the gentle and loving treatment of his restorations, the name of Bodley will be long remembered when that of many of his contemporaries will have been forgotten. But, perhaps, first and foremost, his name will be more closely connected with his perfect genius for, and sympathy with, colour decoration in all its various forms. It is not so much that he struck out on new lines, or aimed at great originality in his treatment of colour design—nay, I may almost say that he followed more or less closely in the traditional lines of mediæval work—but neither in his church designs nor in his decorative designs did he slavishly follow tradition. In every phase of his work and design there is a very strongly marked individuality and stamp of genius, and in none more so than in his colour schemes, whether it be in the decoration of a building, design for embroidery, or wall papers. His intense sympathy for colour is evident in all that he touched—generally quiet in treatment, always delicate and refined, and invariably harmonious, so much so that the term "Bodley Colours" is synonymous with quiet and harmonious colours. Those who know that beautiful and costly, though comparatively small, church of Hoar Cross, and the churches referred to in Mr. Warren's Paper, will know how to value Mr. Bodley's treatment of colour. One of the latest decorative designs he carried out was the complete decoration of the interior of a church built from Sir Gilbert Scott's designs—Christ Church, Ealing, which is well worthy of study. It is quite possible in the latter case, as in others, that criticism may be forthcoming. But we all know how easy it is to criticise, especially in the case of colour decoration, but at the same time how difficult it is to design a scheme for such decoration on a large scale. In no country in the world is it perhaps more difficult to educate the popular mind to a sense of fine colour decoration than in this cold, damp climate of England; and yet in no country does colour add a greater value to comfort and well-being, and certainly in no country was it more valued in the past. We have until lately been so long content with the cold, bare walls of our churches that people have begun to look upon plain plaster and whitewash as material of intrinsic beauty, and any attempt to break down the tradition of the last two and a half centuries in this respect is met with antipathy by some and active opposition by others. We as a nation seem to have lost the power of appreciation of colour as applied to the interior of our churches, or else bigotry stamps any

serious effort in that direction, either in pictorial or decorative art, as "High Church" or "Romish," so that ignorance, prejudice, and bigotry combine in resisting the efforts of those who for the last fifty years have been trying to make colour decoration the handmaid of religion. The individual efforts of architects and artists like Owen Jones, Burges, William Morris, Rossetti, Burne-Jones, Madox-Brown, Butterfield, and others, have done much in helping forward the movement, but I think I may safely say that no architect has done more to teach us the value of interior colour decoration than Bodley, and if this fact stood alone it would be sufficient to raise him to a niche of fame. But it by no means stands alone, for in this Paper we have read how complete was his grasp of all work that came into his hands. It must be allowed, I think, that Mr. Bodley was very fortunate in his career, his early training being with those who were thoroughgoing Gothic enthusiasts; and what might have been a disadvantage to some was a great advantage to him—he had private means, and was therefore in an independent position. Given his acknowledged ability, he could in a great measure pick and choose with regard to his work; he did not hesitate to refuse a work if not congenial, and if a client became troublesome he quietly dropped him. Now, shunting of clients is not a pastime that many of us can afford to enjoy, nor can most of us afford to be arbitrary. The most we can expect is that, with care and tact, we may manage to get our own way; but the delightful position of being able to say to a client "You must do this, or I won't act for you at all," or "If you write any troublesome letters I won't answer them," is not ours. Then again, Bodley's opportunities were great; his work commenced in the early days of the great Church revival, when the demand for Church work was comparatively large. As a rule, he was not hampered for want of means in the carrying out of his work, and this helped to secure the aid of the best artists, sculptors, and builders, which all naturally tended to make his work successful. And, to my mind, we must be thankful that he was not hampered by monetary considerations in his church work, as we know that we have the best that he could do under the best conditions. But still, I think we may safely say that had the conditions of his work been more normal, and 10*l.* a sitting been laid down as a *sine quâ non*, he would still have turned out a work of beauty and good proportion. Our members must have read with great interest Professor Simpson's admirable article in the JOURNAL, and this Paper is a valuable addition to those remarks. One cannot but be struck by the ability and loyalty of Mr. Bodley's pupils; and while mentioning this, may I express the regret we all felt in the premature death of Henry Skipwith, whose able work we all admired, and at the same time to say how glad we are that York Minster has, since the death of Mr. Bodley, been placed in the able hands of Mr. Walter Tapper. But there was another feature of Mr. Bodley's work that was not, I think, touched upon—and perhaps rightly so—in this Paper. At the same time, it is a feature that is too often lost sight of, and yet it is a feature that should, and does, give tone and feeling to all that is truest and best in church work. I mean his Churchmanship; for, from conversations I have had with him, I know him to have been an ardent Churchman, as indeed have been all our best church architects: Pugin, Butterfield, Street, Bentley, Garner, and Bodley were all ardent Churchmen, and it is this great underlying principle in their work that so often gives that indefinable sense of devotion in their churches. I mean that churches may be, and too often are, considered as things of art alone—perhaps academically correct—true in detail, but still lifeless and cold, still lacking in spiritual inspiration. It is this great underlying principle, this spiritual inspiration, this indefinable devout feeling behind the designer that alone can call forth similar devotional feelings in the minds of worshippers. It is this, above all else, that raises church architecture on the highest pedestal of art, that ennobles the mind of its creator, and uplifts the mind of the beholder. Such work has George Bodley left to us, and may we be allowed to emulate the spirit that produced such work!

MR. WALTER TAPPER [*A.*]: It is indeed a pleasure to rise and second Mr. Prynne's proposal of thanks to Mr. Warren for his admirable Paper. My long intimacy with the work of Bodley and Garner enables me to appreciate the difficulties to which Mr. Warren has referred, difficulties which I think he has ably overcome. Naturally I appreciated most the love and reverence which Mr. Warren so well expresses for the master. It is echoed in the hearts of every one of his pupils and assistants. That dignified old-world courtliness of manner, combined with much sweet modesty, was priceless, and to those who had the privilege of his friendship perhaps of more value than the influence of his work, great as is this latter. I worked with Mr. Bodley some eighteen years longer than any other of his men, and during that period I do not remember a hasty or impatient word. This fact will perhaps give you a better idea of the gentleness of character with which he was so graciously endowed. Mr. Warren has dealt so fully with his work that there is little indeed to add. It may have been noticed, however, that few of his churches were vaulted; with the exceptions of Hoar Cross and Clumber, none, I think. The reason for this was Bodley's love for colour, the wooden roofs giving him greater opportunities for this side of his art. Mr. Warren has referred to the prevalent impression that Bodley could not draw. In the ordinary sense of the word this is

true. He was never an expert draughtsman; no water-colours or perspective sketches or even fine geometrical drawing issued from his hands. The very few sketches he made, and I only remember one book, reminded me of William de Honnecourt's outline and were curiously out of drawing. He did not, in fact, attach any importance to drawing in so far as his work was concerned, and he always contended that less attention to pretty drawing would be better for the art of architecture. His buildings were really designed before putting pencil to paper, and he has given me their dimensions in figures beforehand. It was therefore not surprising, on leaving him free and undisturbed on some Saturday afternoon, to find the eighth-scale sketches, half-inch and full-size details (the latter beautifully drawn) of some fine church completed ready for us to tackle on the Monday morning. In his early days he allowed no detail to escape him, and with the smallest he took infinite pains. What happiness it was, too, to get his kindly criticism on our efforts to interpret his ideas. His own methods of drawing were delicious and amusing, but they were hardly such as would commend themselves to most of us. He loved a 3B pencil and hated needle-pointed compasses. Sometimes he went over his details with a broad-nibbed pen, using red or black writing ink, or both if handy. His luncheon was brought in from some neighbouring restaurant, and he ate it as he worked, so that oftentimes there was a mixture of pencil, ink, mustard, salt, with splashes of gravy to give the right tone of colour, and at the end of all a really artistic drawing after his own manner. His relations with the workmen on the actual buildings were all that could be wished. In some peculiar way, hard to define, he gave that invaluable interest in their work, so that it seemed they had no difficulty in carrying out his ideas, and a mason, for instance, who had worked long under his guidance was a man worth knowing for many and obvious reasons. A matter which will perhaps interest this Society was his views concerning the examinations held here periodically. As such, he had practically no sympathy with them, as he showed when writing a short Paper on the subject some years ago, but in so far as they encouraged in young men the study of old work, and gave them that sound academical knowledge without which, he contended, no architect's education was complete, he thought them of considerable value. With these few remarks I again have pleasure in thanking Mr. Warren.

Mr. HENRY LONGDEN said that Mr. Bodley, whom he had known for a great number of years, impressed him above everything as an artist. In everything he did, in his appearance, in the different houses in which he lived, and in everything about him, he was an artist. He was no doubt a fine builder, but he had that quality which was so uncommon of making everything he touched beautiful. In domestic work he would make a house of no merit beautiful by rich colour and skilful adaptations of its internal features. A house decorated by him had a singular air of distinction. He was also a very great admirer of Mr. Butterfield and of Mr. Butterfield's work, and he could tell them one result of that admiration. In the church of St. Alban's, Holborn, which Mr. Butterfield built, it was desired to put a reredos. Mr. Butterfield was still living, but had not worked there for a number of years, for Mr. Butterfield was sometimes rather difficult, and had had some disagreement with the Vicar. Mr. Bodley was approached about the reredos, and he said, "No; Butterfield is living; I cannot touch his church." When Mr. Butterfield died Mr. Bodley undertook it, but he would not touch it during Mr. Butterfield's lifetime. This seemed very little to have to say, but having known Mr. Bodley for so long, and seen him from a rather different point of view from those who had spoken of him hitherto, it might possibly be not unfit.

Mr. MAURICE B. ADAMS [*F.*] said he had personally known Mr. Bodley a great many years, and had always taken a very keen interest in his work. Remembering his first church and having some acquaintance with the erection of his last church, he should like to say a few words about them both, and, in doing so, to add to the tribute they all owed Mr. Warren for his most excellent *résumé* of this wonderful life. He would mention a point that he thought had not been alluded to. They had been shown churches of his built on flat sites, but his first church stood on an extremely difficult and elevated one, and, whatever the faults of St. Michael's, Brighton, might be, one of its greatest merits was the way in which it was made to rise out of an acutely sloping site.* The massiveness and repose which characterised that comparatively small church, the very plain approach to the west end facing the south, necessitating a large number of steps, treated so quietly, so handsomely, and yet in such a dignified manner, were most effective and inspiring. Its vast breadth of brickwork was somewhat relieved by what was called the "streaky-bacon style" which Butterfield so much affected. And then the bold "plate" tracery of the windows, which otherwise would have appeared coarse, always seemed to him to be so thoroughly modified by this broad, quiet treatment of the windowless aisle leading down to the street. The church was uncommonly dark, which accounted for the poor photograph Mr. Warren

* St. Michael's Church, Folkestone, is another example of the great skill exhibited by Mr. Bodley in dealing with an oddly shaped awkward site of varying levels, and it affords a singularly capable instance of his ingenuity in adapting the contour and architectural features of his church to the outline of the land on which it stands. The north front of this church unbroken on plan forms a fine foil to the rest.—M. B. A.

had shown. Mr. Bodley's church now only formed the south aisle to the vast building that had been subsequently erected, and which Mr. Bodley was very sorry not to have been commissioned to do. That indeed is a matter for regret; still, when they studied what Mr. Bodley did as his first church, and compared it with what was added subsequently to it after the inspiration, so to speak, of William Burges's work, they would see what a master Mr. Bodley was, even in his initial stage. There was another church which Mr. Warren had not alluded to—viz. the last church he finished, St. Faith's at Brentford. Mr. Warren had mentioned the very recent church at Kensington Gore as showing somewhat attenuated proportions, and he was perhaps justified in that criticism; but what struck one in looking at St. Faith's, Brentford, was the juvenile enthusiasm with which the whole thing was inspired. That a man of Mr. Bodley's years could design such a virile church as that seemed truly remarkable. It was quite a small, unimportant church, but a more dignified interior he never saw; the whole manner of its composition, leading up to the altar as the centre of everything, the handsome pavement of the nave, which was of course quite simple, showed the master-hand quite as much as in any of the details of which they had heard that evening. With regard to the planning of church buildings, what a change Mr. Bodley's life covered! From the old days of the Gothic Revival, when preaching still obtained the mastery, all through the development of the Catholic Revival, what a part he played in planning his buildings to accommodate them to a better sense of what worship really is and the necessities of modern congregations! One other feature he would refer to—viz. the arrangement of the choir stalls. In the church of the Eton Mission, Hackney Wick, and also the one at Kensington Gore, the seating of the choir towards the west was diagonal, the stalls being carried across at an angle of 45 degrees. He (the speaker) had always been an advocate of the return stalls behind the screen, where the clergy could face towards the altar and carry on the service, and then turn round when they were addressing the congregation. The usual arrangement was to put them choir-wise, facing one another. The old Protestant idea was to turn them round and make the clergy pray towards the congregation. Mr. Bodley's diversified arrangements in the instances mentioned seemed to be a questionable advantage; and it occurred to him, as taking an interest in these matters, that it was somewhat unusual.

MR. WALTER TAPPER said he could answer Mr. Adams's question at once. The reason Mr. Bodley returned the stalls in the manner described was a matter of compromise; he much preferred returning them along the screen as Mr. Adams suggested.

MR. EDWARD WARREN, after acknowledging the vote of thanks, said that Mr. Maurice Adams's remarks interested him, as he had pointed out several things of which he was conscious but had not time to point out. His Paper, as it was, had grown to exaggerated limits, and he had had to cut out a very great deal. For every one of the churches he had referred to—perhaps twenty or thirty—there were probably at least three he had not mentioned. The output of Mr. Bodley's long life was extraordinary in the number of buildings he had erected and altered. He once asked him if he could form any sort of computation of the number of churches he had built, but all he could get from Mr. Bodley was, "Not a great many." He supposed he did not think sixty or seventy new buildings and three to four hundred altered ones a very great number.

MR. WILLIAM A. FORSYTH [*F.*] writes:—

Apart from the literary excellence of Mr. Warren's Paper, the Institute is to be congratulated upon possessing a valuable contribution to the human side of a great architect's career. The biographical is inseparable from the chronological record, if the greatness of the artist is to be understood.

My reason for writing these few lines is to suggest that the Sessional Papers be enriched once, if not twice, in each year by a review of the work, together with a brief account of the life, of a British architect whose career has but recently closed.

To the following suggested list, many names could be added, but I venture to think that a discourse by a former pupil or assistant of Bentley, Burges, Nesfield, Pearson, Butterfield, G. G. Scott, Brooks,* and Campbell (Glasgow), upon the works of their respective masters, would be of intense interest and educational value.

* It may be mentioned that a Memoir of Mr. James Brooks will appear in an early issue of the JOURNAL, contributed by Mr. J. Standen Adkins, of the firm of Messrs. James Brooks, Son, & Adkins.—ED.

TOWN PLANNING.

PAPERS COLLECTED BY THE R.I.B.A. TOWN PLANNING COMMITTEE.

XI. ARCHITECTURE AND TOWN PLANNING.

An Address delivered at the Guildhall Conference on Town Planning, 10th December 1909, by Professor Beresford Pite [*F.*].

I wish at first to remark on the happy position we are now in, in that the Town Planning Bill has become an Act and is at once removed from the atmosphere of partisanship and party politics. Under these circumstances, one is at perfect liberty to voice what I am sure we all feel—a great debt of gratitude which we are under to Mr. Burns for his enthusiasm, his political tact and power, and above all, for his strong sense of the value of architectural dignity to a city. Mr. Burns's record on the London County Council in connection with their great Strand Improvement, and in connection with the schemes for the new County Council Hall, deserves recognition in connection with the subject of Town Planning.

Before passing away from the personal aspect of the question, I should like to draw attention to the enormous debt that London is under to its great landowners. Generally speaking, all our garden squares—all the dignified and spacious parts of this city where alone almost dwelling is healthy and possible—are due to the private enterprise, the personal expenditure, of the individuals who are now described technically as the "ground landlords." What London would be without the charms of Bloomsbury and (withdrawing it altogether from the cynical atmosphere of the Londoner's "Log Book") the charms of Bayswater, of Belgravia, to say nothing of, in the other end of London, the discreet wideness of such districts as are included in Lord Tredegar's estate in Bow—what London would be without this spaciousness and without these gardens, it is difficult for us to conceive. The large squares will go down to posterity bearing the great names of Grosvenor and Cavendish and Eaton, as monuments sufficient to attest the public spirit and the architectural qualities of their original layers-out; and it should be a matter for some congratulation to the community when it reflects that private enterprise and private expense have now resulted in private profit.

To come to the architectural aspects of the question, I wish, in the first place, to make a few remarks on (I.) planning the thoroughfares; (II.) on planning the sites; (III.) on planning for extension; (IV.) on planning architecturally, with a few final words on education in the subject.

PLANNING THE THOROUGHFARES.

Plan the thoroughfares for access to and access from the outside world by road rather than by rail. London, as we know it, may be so soon choked with disabled and derelict motor omnibuses that it will be a city without thoroughfares, dependent entirely upon tubes and subterranean tramways. The true thoroughfare will either be underground or through the air—either by tube or by aeroplane. We inherit corkscrew streets, and proceeding to choke up our own ducts, shall ultimately achieve a Labyrinth without a Dædalus. Half a century of railway selfishness has killed the art of roadway scheming. Though England may well be proud of her position and influence in the art and science of constructing railways, and all that that involves and brings, yet no Londoner can be proud of a single one of the railway bridges which cross the Thames, or of the planning of access externally to our railway termini. It may be that our natural insular constitution is a geographical cause for our constant neglect of any theory of thoroughfare, though even our seaports, by which the world gets access to us and we take departure from home, are practically only railway depôts; and Dover—the very Port of the World to England, with its fine valley through which the processions of kings and merchants used to enter the country—we view now, with its dismal railway tunnels and miserable platforms, as something to be hurried through and avoided on account of its ignominy. Bicycling has now begun to alter the public view of the question, and motoring is enlightening us pretty rapidly, but it is the dumb needs of the multitude who neither bicycle nor motor, but who spend their daily life as the people of the street, that we have to consider.

PLANNING THE SITES.

As the planning of the thoroughfares creates, so we have to plan the sites, first for dwellings—for dwellings constitute primarily the town—sites that shall be healthy and pleasant, and, as far possible, freehold, though, if freehold, conditioned for mutuality by necessary covenants. And I would venture the suggestion that covenants enacted by legislation are less onerous and less personally restrictive than covenants of contract and agreement which are exercised by individual owners over their estates. Then we have to consider sites for public buildings—sites that shall be dignified and useful both for Church and State—

necessarily central. Such sites bestow a certain increase of value to land adjacent to themselves; and in an ideally modern lay-out such adjacent sites should belong to the municipality—a central reserve—best of all, a central park of public purpose and usefulness. Then, sites for commercial purposes; for shops; at the back of the shops, warehouses; in connection with the warehouses, factories; in other words, market streets; exchanges, with the unsightly stores out of sight; the noxious factories at a distance; all considered with a view to the mutual comfort and usefulness which is essential to commercial prosperity. Besides, electric works, gas works, water works, sewerage works have to be planned and placed; to say nothing of railway depôts, sites for dangerous stores, such as petroleum, and what I would roughly describe as smoke sites.

PLANNING FOR EXTENSION.

We should plan for extension, that is for growth. Any and every healthy city should grow. This will apply in detail to each of the previous chapters of dwellings, public or commercial buildings; but remembering always that dwellings extend more rapidly and require more space, and that, with the growth of a city, there is a tendency always to seek the natural amenities of fresh air and landscape. Therefore, in the interests of the town suitable sites for such amenities should be included in the neighbourhood of the town, and so earn their rateable value and increase its prosperity. Then a final point on this head of extension is that extension increases the value of the central sites and the difficulty of dealing with them. Only by a long prevision can this unnatural and exaggerated value at the centre be dealt with. The initial way of dealing with it is at once to lay out the main thoroughfares of a suitable width for a city of the larger rather than of the smaller size: the increase of width in the thoroughfares will prove to be no extravagance but a convenience, even in the early stages. Extension will thus become easy, overcrowding will be made impossible, and that which is common to all will become beneficial to all.

PLANNING ARCHITECTURALLY.

I now come to the point of Town Planning architecturally, that is, planning with forethought, for purpose, for economy, and for that sense of beauty which may possibly be summed up in the word refinement. Architecture is the art of beautiful building. But the aggregate of beautiful building has never yet been considered. It has a cumulative importance to the architect, who considers not only the immense problem of one great building, with its varying purposes, materials, and arts, but the problem of combination. And the problem of the combination of a great number of such buildings, each one embodying a different phase of social or national life, work, and thought, is indeed vast; and one may well suppose that it is a problem too large for any single mind. If you conceive a town laid out by some architectural genius, with its churches, its municipal buildings, its commercial buildings, and its domestic buildings, all wearing the impress of the same mind, an inevitable sense of monotony and sameness will be present without doubt. Beauty and amenity in a city are certain elements in its success and value, the appearance and sense of which have importance in the Town Plan. Width of a street for brightness, symmetry of buildings for dignity, curvature of street and accident for picturesqueness, alignment and contrast; avenue and square, vista and enclosure, all connote qualities which should be considered in the lay-out of a town.

EDUCATION.

Now I come to my last point, Education. At the present moment it is not a subject for doctrine nor ripe for deduction. Surprising is the German school of picturesque irregularity in Town Planning. It is nearly thirty years ago since I stayed for more than a week in that wonderful little town of Rothenburg, on the Tauber, where the walls and palisades almost of the siege which it stood in the Thirty Years' War against the forces of Tilly, exist to this day. You can picture the sort of half-way house which it represents between the age of the cross-bow and the age of the pom-pom. There it is, held up, hanging between heaven and earth, through lack of communication with the outer world. We now find, with great interest, Dr. Stübben, another German student of this subject, exhibiting such mediæval towns for our present consideration. Of course it is obviously possible to take a sufficiently large number of freaks and accidents and classify them and deduce doctrine for them. Any Accident Insurance Office can do that with the ordinary run of burglaries and domestic incidents, and it would only require a certain classification of architectural and building accidents to assort the freaks and accidents of war, flame, unemployment and famine, and classify them for study.

Then we have the symmetrical school—the school of the American blocks and avenues known by arithmetical numbers. We have that represented at a somewhat early and almost promising stage in Europe by the city of Turin in Italy, by Havre in France, or by Carlsruhe in Germany. But it would be wiser for us not to attach our faith either to the picturesque or to the symmetrical school, but to analyse the picturesqueness of the German and home cities that we know, separating their historical elements from their physical and geological ones.

To take such a city as Edinburgh, with its Grecian Acropolis and modern railway in the valley, and the great suburb laid out by the brothers Adam which is now incorporated in the town; Dublin, with its charming river—not charming in essence, but charming in nature—upon which the Four Courts and the Custom House sit so delight-

fully, and on to which, now that the intermediate street has been cleared out, Sackville Street opens with such an amount of dignity; Bristol, with its own interests; Liverpool, with a certain grandeur of municipal buildings; Manchester, with its needs yet unsolved; Bath, with its beauties; and Buxton, with its attractiveness at this time of the year.

But of all cities, certainly London is the most educative to us all, for in London we can see how to do it as well as how not to do it. To begin with, we have the river, and I sincerely hope that the new Port of London Authority will be seized not only with the value of the river to London trade, but with the essential fact that London is a river-side city and always has been. A little consideration of the map of London will show that the main thoroughfares north and south conform themselves to the general direction of the river, with its semi-circular sweep of hills to north and south; its winding direction and undulating banks making a great circle around the plain of Lambeth, in the middle of which rises the temple dome of Bethlehem. The bridges and the accesses to them and the railway depôts—much needing study and care; then the historical centres, Greenwich (almost lost sight of without the steamboats); the Tower; St. Paul's; St. Bartholomew's, and the Charterhouse, that sweet little asylum reminding one of Oxford or Cambridge, though unfortunately smelling of bacon-smoke and meat; Westminster; Lambeth—I mean the Palace (a pilgrim place from the other side of the Atlantic, of which we take little account); the unrivalled charms of Hampton Court; and then our group of Royal residences and their arrangements, from St. James's along to the Rotten Row, or *route du roi*, to Kensington; the picturesqueness of St. Paul's from Fleet Street—a subject which I hope this distinguished and honourable Corporation which affords us such kind hospitality to-day will bear in mind in connection with the St. Paul's Bridge. If Holborn Viaduct were only grand what a spectacle it would be from the great width below of Farringdon Street! Then we have the long rise and fall of Oxford Street, always noble, always interesting and attractive. We have the park access to London alongside Kensington Gardens, Hyde Park and Bayswater, along Piccadilly, and that wonderful entrance right into the heart of the city along the Embankment. We have the descent from the northern heights at Hampstead and from the southern heights of Sydenham and Clapham. Even our public places teach us, by their variety of success and failure—Trafalgar Square, the noblest site in Europe, distinguished by its absurd column; we have Buckingham Palace, with the great Victoria Memorial to be shortly completed; and can reflect on what Pall Mall would be if it were only carried through into the Green Park, with access directly to the new monument; Piccadilly Circus, long ceased to be a circus, now an unhappy polygon—when is it to be remedied?—to say nothing of that South Kensington muddle of noble buildings, helter-skelter on sites which might have been planned, with a little foresight, into the noblest results. We may well ask who is the planner of London. How absurd the question would be if London had not been burned down and Sir Christopher Wren once made a complete plan for its rebuilding!

There are many lines for historical study that I would just suggest. Our earliest Biblical reading brings us face to face with Nineveh, that great city in which there were men, women, children, and cattle almost innumerable, into which the prophet Jonah had to go a day's journey before he could gain an audience—a garden city, a farmyard city, a park city of the earliest authority and date. Then we have Babylon, the city of terraces; Palmyra, with its wonderful remains, the city of colonnades; we have Selinus in Sicily, a city lately brought to the notice of architects in London by a wonderful restoration by a distinguished French student. We have Athens, with its acropolis; Rome, with its wonderful forum, the palace city, Spalatro on the Adriatic, and the castra of its empire. Then the renaissance world, for the first time in the history of the building art realising the importance in lay-out of the connection of roads and gardens with buildings; we have it exhibited in the Vatican, in Versailles, at Dresden. Then we have modern Paris, modern Vienna, modern Munich, besides the plan of Havre laid out by Louis XIV., which I have already mentioned, well worthy of attention. We have Berlin and Washington and the Australian capital yet to be. There is ample scope for observation, for doctrine and for prophecy. The opportunity has come to us. The use made of the opportunity which this new public movement affords will indeed reflect this generation and age. Our spirit, our wealth, our power, our mental views, our intellectual and artistic use of the opportunity, are in our hands.



9 Conduit Street, London, W., 19*th February* 1910.

CHRONICLE.

SPECIAL GENERAL MEETING, 7th FEB.

A Special General Meeting was held in accordance with notice on Monday, 7th February, (1) to consider alterations in the draft of the Revised By-laws, and (2) to resume the discussion of the Regulations for Architectural Competitions, adjourned from the Meeting of 3rd January.

The Revised By-laws.

The notice-paper convening the Meeting contained the following statement:—

The revised By-laws which were approved by the General Body by Resolution passed at the Special General Meeting on 21st July 1909 and confirmed at the Special General Meeting on 10th August 1909 have been submitted by the Council to H.M. Privy Council for approval. The Legal Adviser to the Privy Council has indicated certain alterations which it is necessary to make in order to obtain the approval of the Privy Council. These alterations are set out below and indicated by the initial **A**.

The Institute's Solicitors also recommend that certain alterations be made in order to improve the drafting and arrangement of the Revised By-laws. These alterations are also stated below and indicated by the initial **B**.

The Council submit these proposed alterations for the approval of the General Body:

B 1. Instead of heading "Membership" read "Members and Licentiates."

B 2. At the end of 2, insert: "Every candidate for Associateship after the year 1913, before presenting himself for the Final Examination, shall have either (*a*) passed through the course prescribed under the scheme to be adopted by the Council as provided in By-law 44, or (*b*) proved to the satisfaction of the Board of Architectural Education that he has been otherwise properly trained as an architect."

B 4. Insert heading "Honorary Members."

B 7. Insert heading "Licentiates."

B 13. Omit the last eleven words and substitute "in the case of a Member has paid his entrance fee and first annual subscription, and in the case of a Licentiate has paid his first annual contribution."

B 14. In the eighth line, after the word "Member" insert "or Licentiate."

A 24. In the seventh line, omit the words "or who shall refuse or neglect to be bound by a published Resolution of the Council."

B 25. In the thirty-first line read: "In any case of such suspension or expulsion the fact shall, if the Council so decide, be recorded in the Journal of the Royal Institute and published in such newspapers as the Council may determine."

B 26. In the twentieth line omit the word "forthwith."

B 30A. This By-law to be numbered 31 and numbering of subsequent By-laws to be similarly corrected.

B 32A. In the third line after the words "serve again" insert the words "as ordinary or Associate Members respectively," and in the fourth line after the words "seniors in" insert the words "continuity of."

B 35. After this insert the following new By-law:—

"Any notice required by the Charter or the By-laws to be given to Members may be a written or printed notice and may be sent to Members or Licentiates either separately or in or with, or if printed may be printed under the heading of 'Notices,' as part of the next issue of the Journal of the Royal Institute, as the Council may direct, and any notice shall be deemed to have been duly sent to a Member or Licentiate when such notice, or the Journal in which it is sent or printed, and addressed to the last address of the member or Licentiate appearing in the *Kalendar* of the Royal Institute, has been put into the post or otherwise delivered."

B 45. Omit this By-law (see By-law 2).

B 58. In the seventh line after the word "thereat" insert the words "and such proceedings shall be private and shall not be communicated to the public Press without the written consent of the Chairman of the Meeting."

A 63. Omit this By-law.

A 65. Omit this By-law and substitute the following:—

Alteration, Suspension, or Repeal of By-Laws. "A Resolution respecting the adoption of a proposed By-law, or the alteration, suspension, or repeal of any existing one, shall be declared to be carried at a Special General Meeting if there shall be present at least forty Fellows; and if the same be supported by the votes taken by show of hands of a majority consisting of two-thirds of the Fellows present and voting thereon.

Resolutions on Property or Management. "A Resolution of any proposal affecting the property or management of the Royal Institute shall be declared to be carried if there are present at least fifty Members, of whom at least forty shall be Fellows, and if the same be supported by the votes taken by show of hands of a majority consisting of two-thirds of the Members present having a right to vote and voting thereon.

Resolutions on Professional Questions. "A Resolution on any professional question shall be declared to be carried if there are present at least forty Members, of whom at least twenty-one shall be Fellows, and if the same be supported by the votes taken by show of hands of a majority consisting of two-thirds of the Members present having a right to vote and voting thereon.

"A resolution declared to be carried, and requiring under the provisions of the Charter to be confirmed at a subsequent General Meeting, shall be deemed to be so confirmed provided it be by a majority of those present having a right to vote and voting thereon at the said subsequent General Meeting.

"In all cases the voting shall be by show of hands; and a Resolution of the Royal Institute so voted shall be declared to be carried if supported by a majority of those present having a right to vote and voting thereon."

THE CHAIRMAN (Mr. JAMES S. GIBSON, *Vice-President*), having formally presented the amendments as printed on the notice-paper, said he proposed to put each amendment separately, and would ask the Meeting to vote upon them by show of hands.

The amendments proposed in By-laws 1, 2, 4, 7, 13, and 14 were respectively put and carried.

The alteration in By-law 24 being before the Meeting, the SECRETARY stated that the By law as submitted to the Privy Council read as follows:—"24. Any Member or Licentiate contravening the Declaration A, B, C, or D, as the case may be, signed by him, or conducting himself in a manner which in the opinion of the Council is derogatory to his professional character, or who shall engage in any occupation which, in the opinion of the Council, is inconsistent with the profession of an architect [or who shall refuse or neglect to be bound by a published Resolution of the Council], shall be liable to reprimand, suspension, or expulsion in manner hereinafter provided. Any Member or Licentiate who may be convicted of felony shall, *ipso facto*, cease to be a Member or Licentiate of the Royal Institute." The Privy Council, the Secretary went on to explain, declined to allow the words "or who shall refuse or neglect to be bound by a published Resolution of the Council," and it was proposed to omit them.

THE CHAIRMAN said that it would be within the recollection of members that these words were inserted to enable them to deal with any Member or Licentiate who should take part in any competition which had been barred by the Council. The Council considered that it was not desirable to mention competitions specifically in the By-laws, and that the same object could be attained by getting rather wider powers from the Privy Council, so that any members contravening a published Resolution of the Council on any matter would be liable to some punishment. That was the origin of the insertion of the words to which the Privy Council objected. The Privy Council declined to give such wide powers, and it therefore rested with the meeting to determine whether any other words should be inserted to achieve the object originally in view.

Mr. THOMAS HENRY WATSON [*F.*]: Would it meet the case if you added the words "on competitions" after "Resolution of the Council"?

THE SECRETARY, at the request of the CHAIRMAN, read the words as originally drafted, viz.: "Or who shall take part in any architectural competition as to which the Council shall have declared by Resolution published in the JOURNAL of the Royal Institute that it is inadvisable for Members or Licentiates to take part."

Mr. WATSON: May we say "Resolution of the Council relating to competitions"?

Mr. H. HEATHCOTE STATHAM [*F.*]: We should still have to ascertain whether the Privy Council would accept it.

Mr. W. G. WILSON [*F.*]: Is it competent to us to move the re-insertion of the words in the original draft as just read by the Secretary?

THE CHAIRMAN: Quite.

Mr. WILSON: Then I beg to move that those words be re-inserted.

Mr. A. R. JEMMETT [*F.*] seconded.

THE SECRETARY: I ought to say that, in discussing this point with the representative of the Privy Council, he said that they would probably accept that form of words, but he suggested that the words "it is inadvisable for members to take part" was rather a weak expression; that, as you are taking power to expel members, it might be considerably stronger.

Mr. WILSON: I propose the words "not permissible" instead of "inadvisable."

THE CHAIRMAN, after conferring with the Secretary, suggested the following wording: "Or who shall take part in any architectural competition as to which the Council shall have declared by Resolution published in the JOURNAL of the Royal Institute that Members and Licentiates must not take part."

THE HON. SECRETARY: Then you run counter to the very strong feeling of a good many members against the absolute veto.

Mr. K. GAMMELL [*A.*] said he had just come back from Bournemouth, where there seemed to be a very flagrant case indeed which bore upon this matter. Passing along Old Christchurch Road there he saw a board up with a certain name on it, followed by the letters "F.R.I.B.A." He had always understood that this sort of thing was not countenanced by the Royal Institute. He had made some inquiries about this particular case, and found that it was aggravated by the following circumstances. He was informed that the Council of the Institute had been approached in respect to this particular competition, which was for a small library assisted by Mr. Carnegie. The conditions were not satisfactory, and the Council, after a vain endeavour to get them amended, had advised members of the Institute not to take part in the competition. Notwithstanding this action of the Council, a member of the Institute practising in Bournemouth had sent in designs and had been appointed architect of the building. They ought certainly to protect themselves against conduct of this kind, and he, for one, should very much deplore the elimination of this particular wording from the new By-law. He should like to second Mr. Wilson's proposal that the wording be considerably strengthened, in the hope that the Privy Council would accept the suggestion when it was sent up the second time

Mr. W. HENRY WHITE [*F.*] considered that the words would not be at all too strong, because any competition which the Competitions Committee had carefully considered, and stated that it was inadvisable for members to take part in, would certainly be one in which they ought not to take part.

Mr. E. M. GIBBS [*F.*] said he cordially supported the Resolution. If the Institute took a strong position in many of these respects they would not only strengthen members' hands, but would induce members of the profession who were not members of the Institute at present to join it. The feeling generally in the country was that the Institute was not strong enough, and did not defend them as it ought.

Mr. JEMMETT said he thought it advisable that the Institute should do either one thing or the other. He thought the Council's advice very unsatisfactory on both sides. It left it open to much misunderstanding and much hardship. It would be more dignified for the Council to leave it alone altogether, or if they felt strongly about it to take a strong line and forbid it once for all.

THE CHAIRMAN said there was a question of practical politics in dealing with these competitions which should be referred to. As a rule the Competitions Committee considered carefully the conditions of all competitions they could get hold of at a very early stage. There were numbers of competitions which were just on the border line, as to which it was difficult to say that they were wholly satisfactory so far as the profession were concerned; but many of them were made wholly satisfactory through the efforts of the Competitions Committee. If words were inserted making it imperative for them to do nothing at all in reference to competitions, the Council might be placed in a very difficult position, because there would be competitions which required delicate handling, and might after all work out to the benefit of the profession at large. He thought they ought to word it so as to leave the Council free either to accept them or to bar them if they could not get the conditions amended.

Mr. WHITE: If the Competitions Committee find they cannot get the conditions made exactly as they like, but that they still are not bad enough to condemn altogether, they will simply do nothing; they will not bar the competition.

THE CHAIRMAN: Quite so.

Mr. WHITE: That would meet the case. You can still have the wording strong enough, but it would rest in the discretion of the Council.

THE CHAIRMAN: Might we word the passage as follows: "Or who shall take part in any competition as to which the Council shall have declared by a Resolution published in the JOURNAL of the Royal Institute that Members or Licentiates should not take part."

Mr. WILSON: The matter would be wholly in the hands of the Council. The Competitions Committee, unless the conditions were very unsatisfactory, would never bar the competition—they would always lean to mercy. I propose the word "shall" in the concluding words.

The amendment of the By-law as proposed was then put from the Chair and carried.

The alterations proposed in By-laws 25, 26, 30A, and 32A were respectively put and agreed to.

With regard to the new By-Law 35, the SECRETARY explained that their solicitors had pointed out that the word "notice" was used in various By-laws with regard to Meetings, but there was no definition of the word. They had therefore, on the advice of their solicitors, adopted the definition given in the By-laws of other institutions, so that there should never be any question as to whether a member had received notice or not.

The new By-law and the omission of By-law 45 were respectively put from the Chair and agreed to.

On By-law 58, as to the insertion of the words "and such proceedings shall be private and shall not be communicated to the public Press without the written consent of the Chairman of the Meeting," the CHAIRMAN stated that at the present time they had no power to prevent any member of the Institute from reporting the proceedings at a Business Meeting, and the Council now proposed to take power to render that impossible in future.

The proposals to add these words and to omit By-law 63 were put and agreed to.

With regard to the By-law to be substituted for By-law 65 in the revised draft, the CHAIRMAN explained that not only the wording was altered, but the principle also. The alteration in principle was necessitated by the fact that the Charter does not give, and never has given, the Institute power to determine any questions relating to the By-laws outside the walls of the Institute. In the past it had been their practice to take a poll of the whole body of members on questions affecting the constitution, such, for instance, as the revision of the By-laws, and the Privy Council had apparently been unaware of the contradiction between the Charter and the By-laws. The Charter, as a fact, gave no power for such questions to be determined by poll. The machinery for taking a poll of the General Body which was incorporated in the existing By-laws had been declared by the Privy Council to be *ultra vires*; we had no right to have it in the By-laws, and were not going to get it any more. That meant the omission of By-laws 63 and 65 in the draft, and the substitution of a new By-law, that now before them.

A MEMBER: Can we not take a poll?

THE CHAIRMAN: You cannot poll the members of the Institute on any subject whatever. That, as I understand, is the actual position.

Mr. MAX CLARKE [*F.*]: Would you read the letter from the Privy Council's solicitor which indicates this?

THE CHAIRMAN: The communication was verbal, not by letter.

Mr. HERBERT SHEPHERD [*A.*], referring to the first portion of the By-law that "a Resolution respecting the adoption of a proposed By-law," &c., shall be carried "if there shall be present at least forty Fellows," said he had taken the trouble to find out what the average attendance had been at the General and Special Meetings of the Institute. He had taken the attendances of the whole of the members for the last four years, and found that the average attendance worked out at 37 Fellows; and the most remarkable thing was that the number was exactly the same with regard to the Associates—viz. 37. Those figures were interesting, as showing that the Associates paid as much attention to and were as much interested as the Fellows in the business brought before the Meetings. He therefore regretted very greatly that the Committee and the Fellows who had brought forward these By-laws had not seen their way to give the Associates a more lively interest in the proceedings. He had also taken the attendances at discussions on By-laws separately, and found that whereas there were only 32 Fellows on an average who attended at the Meetings for discussions on By-laws, the Associates' attendances fell to 15. He should mention that he was leaving out of account the Meeting called for Fellows on the 29th July last to confirm the By-laws, at which they failed to obtain a quorum. With regard to the second paragraph, which related to a proposal affecting the property and management of the Institute, he questioned whether they had the power to insert this word "property." It was a well-known fact that a corporate body could not pass any By-laws which were not distinctly laid down in the Charter, and he failed to find it anywhere in the Charter. The provisions in the Charter with regard to By-laws failed altogether to mention property. There are in the Charter allusions to the funds of the Institute, but that referred to the income and not to the property.

Mr. W. H. ATKIN-BERRY [*F.*]: Do we not understand, sir, that this amendment is made by the legal advice of the Privy Council; that it is not drawn by our own Council?

THE CHAIRMAN: Yes; the new By-law is drawn by our Council.

Mr. ATKIN-BERRY: But this is marked A, and it is stated on the notice-paper that amendments marked A are by the advice of the legal adviser of the Privy Council.

THE CHAIRMAN: They are drafted by the Council of the Institute in accordance with the suggestions of the Privy Council.

Mr. SHEPHERD: My point is with regard to the deletion by the Privy Council of the power to take a poll. You say that the Institute cannot possibly take a poll on any question.

THE CHAIRMAN: No. The Charter, by Clause 33, states: "The Royal Institute may from time to time by Resolution of a General Meeting, confirmed at a subsequent General Meeting, which shall be held not less than seven and not more than twenty-eight days after the former Meeting, make and adopt such By-laws as may be deemed expedient, and may in the same manner vary, suspend and rescind any By-laws and make and adopt others in their stead, but so that the By-laws for the time being be not in any respect repugnant to the law of England or inconsistent with this Our Charter"—that is to say, you cannot make By-laws that are inconsistent. Then paragraph (*c*) of Clause 34 says: "The mode, time and place of summoning and adjourning General Meetings, whether Ordinary, Business, Special, Annual or otherwise, and the quorum for and the mode of voting at such meetings, whether in person or by proxy, or by ballot or by voting papers, or otherwise, and the number of votes which shall form an effective majority at such meetings and the conduct of proceedings thereat." The real crux of the matter is the word "thereat." The Privy Council inform us that you must vote at a meeting in the room, and they cannot give us power to do anything else. I really do not think, if you come to consider it, that it is a hardship even to the provincial members, if they wish for any serious alteration in the constitution of the Institute, that they should have to come to London and register their vote here.

Mr. SHEPHERD: The conditions are considerably altered. We have now, according to the KALENDAR, 2,226 members—1,338 Associates and 888 Fellows. Personally, I do consider it a hardship not being allowed to take a poll. One

has to remember, too, that these By-laws will possibly be in force for something like twenty years before they are revised. When the existing By-laws were first framed the total membership was about 1,100; in twenty-two years it has practically doubled itself. And there is a very much more important point to be considered—viz. that, in addition to the 2,200 members of the Institute, we have the members of the Allied Societies, who are in the profession but are not members of the Institute, and any resolutions or any proceedings which originate in this room affect their interest. I find that members of the Allied Societies who are not members of the Institute number roughly 1,190, and that there are some 320 members abroad. Hence the total number of professional men affected by some possible resolution or action taken by the Institute is close upon 4,000. My contention is that it is not right, it is not proper, that it should be laid down in the By-laws that 40 or 50 members of the profession should have power to pass a resolution which may practically affect 4,000. Therefore I urge most respectfully that this matter be referred back, so that the Governing Body might find some means by which architects who are not at present members of the Institute can at least express through their Societies their views on matters of importance.

Mr. Max Clarke: I take it that they can, because the Charter says "by proxy."

Mr. Shepherd: But under these proposed By-laws you are not taking any powers to do it by proxy.

Mr. W. Henry White [*F.*]: We are all very grateful to Mr. Shepherd for bringing these figures before us. The general feeling apparently has been, amongst many Associates, that the Fellows do not take sufficient interest in the affairs of the Institute; but it appears that though they number considerably fewer and probably have less time at their disposal than Associates, the attendance is the same. Mr. Shepherd's figures are very interesting, and they strengthen us in accepting the Council's and the Committee's decisions upon matters which are reasonably left to them. I also think that many members of the Allied Societies who are not members of this Institute might become so.

Mr. Matt. Garbutt [*F.*]: As I understand, the effect of the Chairman's statement is, that if we want a poll of the members we shall have to get another Charter.

The Chairman: An alteration of the Charter.

Mr. Garbutt: Then I do not think the matter worth discussing further.

Mr. K. Gammell [*A.*]: Perhaps the reason for Associates not turning up in larger numbers is that they have no right and no standing whatever in the matter when By-laws are being discussed; it is only by the courtesy of the Chairman that they are listened to—they have no voting power; and whenever a resolution has been carried it has been owing to the progressive Fellows, to whom I personally owe a very great debt indeed, because I proposed at one meeting that the number of Associates on the Council should be increased by two, and it was entirely by the action of the progressive members among the Fellows that it was carried.

Mr. Wilson: Is Mr. Max. Clarke's contention right, that voting can be by proxy; because that is a very important matter in the case?

The Chairman: Yes; we have power by the Charter to vote by proxy, but we have not drafted any By-law at present to deal with it.

Mr. Wilson: If we agree to these By-laws, we have no power to alter them?

The Chairman: We can alter them later by the sanction of the Privy Council.

Mr. Wilson: I think, as Mr. Shepherd has pointed out, this is a most serious matter, affecting about 4,000 members. There might be some very material point governed by 40 Fellows.

Mr. W. C. Fenton [*F.*] (Sheffield): As regards provincial architects, I think the answer to the objection raised by Mr. Shepherd, that so many of the provincial architect would be unrepresented on occasions of this sort when important matters may come up for discussion, is that if they think the matter is of sufficient importance they will come here, as we ourselves have come to deal with the competitions question to-night. I myself have come from the North of England, and I am sure that if other provincial architects are sufficiently interested in any matter that they think will affect them seriously they will take the trouble to come too. But I do not think provincial architects need any defence or very much looking after; I believe they are quite willing and capable of coming and attending to business of that sort if they think it is necessary. I may say further that we always find there are a sufficient number of members of the Institute in London who will look after our interests for us on ordinary occasions; but on the other hand when we think that any matter is of importance we should come up and speak for ourselves.

Mr. Shepherd: My point, which I think has not been quite understood, is that it would be possible for a resolution or an amendment to a resolution to be passed in this room without anybody who was not present being able to have any knowledge of it. That is the point I want to make clear. Is it not possible for a matter to be rushed through without the knowledge of the General Body?

The Chairman: Under the By-laws we are now discussing, the necessary attendance has been actually doubled. That was done with the object of getting members to come here and take an active interest in any matter under discussion. When any alteration of the By-laws is put forward members would come from the provinces and discuss it, if the amendment is of serious moment and they think it worth their while. No resolution can be rushed through; every subscribing member has previous printed information of the exact terms of any amendment, alteration, or addition that may be proposed. If he wishes to take part in the discussion, he has but to come to the meeting and register his vote.

Mr. T. H. Watson [*F.*]: May I point out the principle on which an arbitration is conducted should there be more than one arbitrator? All the arbitrators meet together, carry on the discussion and make their award in the presence of the others. The same principle should apply here. The forty members or more whose attendance is required would be dealing with affairs that intimately concern every member, and it being competent to them to determine a question they should not come to a decision without hearing all sides. Members should be present in the room with others to hear what is to be said for and against and to give their decision upon it. I think that is a very important principle.

Mr. A. Saxon Snell [*F.*]: The fact has been referred to that we have no By-law enabling votes to be given by proxy. To discuss this matter notice would have to be given. A new By-law might be suggested, but we could not deal with it to-night.

Mr. Max Clarke: We are discussing the draft By-laws, and can propose any amendment we desire.

The Chairman: Yes. Any amendment bearing upon the subject.

Mr. Max Clarke: I am afraid I have misunderstood the explanation given of these alterations on the notice-paper. It says: "The legal adviser to the Privy Council has indicated certain alterations which it is necessary to make in order to obtain the approval of the Privy Council. These alterations are stated below and indicated by the initial A." May I ask whether these By-laws were drafted by some member of the Privy Council or their legal advisers?

The Chairman: The legal advisers to the Privy Council have indicated certain alterations and we have revised the By-law in accordance with these suggestions.

Mr. Max Clarke: Have they indicated that voting by proxy is inadvisable?

THE SECRETARY: The Privy Council had before them the draft By-law as sent up from the Institute and they said they could not accept that, and pointed out certain changes that would have to be made. They have not been asked about proxy voting as the point had not arisen.

Mr. MAX CLARKE: Personally, I do not think it makes the smallest difference, but it does appear to me that, if the Meeting think it desirable, they can insert a new clause providing for voting by proxy. I should like the Chairman's ruling upon it.

THE CHAIRMAN: It would be competent to the Meeting to propose a new clause; but, personally, I hope you will not attempt anything of the kind; it is much too great a matter.

Mr. A. R. JEMMETT [*F.*]: There are some twenty of us here who now realise for the first time that under the new By-laws there will be no power of taking a poll of the whole Body. I cannot help thinking that members generally, if they knew what the point before us is, would want to come and discuss it. It seems to me to amount to a revolution in our constitution, and I think we ought not to pass this By-law until the whole of the members of the Institute thoroughly realise the point and have time to come and discuss it and say whether or not they want anything in the place of polling by voting-papers. Provincial members, I think, will feel very keenly about this, for there is already a feeling among them that the tendency is to try and run things up here without any consultation with them. I myself do not wish to go against anything the Council propose, but I think it is not advisable to pass such a By-law now without the whole of the members realising the condition of affairs.

THE CHAIRMAN: The passing of these By-laws does not mean that they are fixed for all time. Anything found to be a hardship in them could be remedied by having them altered.

Mr. JEMMETT: You would have to go to the Privy Council again, and that, we have been told, costs a lot of money. I venture to suggest that a notice should have been inserted in the paper pointing out that the ballot was done away with and that this new By-law was proposed to take its place, and giving the reason for the change. If this had been done there would have been at least two or three times as many members present as there are. Again, we have been informed that the communication from the Privy Council on this point was simply verbal and not in writing. May I suggest that it would be only a right and proper thing—for our own protection—for the Institute to obtain the Privy Council's objection in writing before we alter the By-laws?

THE SECRETARY: May I explain that the Privy Council give us this advice as a matter of courtesy; we cannot demand it. The proper procedure is to send the By-laws in, and it is open to the Privy Council to reject them if they think fit. But what they have done in this case is to talk them over with us and point out what we may do and what we may not do. But it is only as a matter of courtesy.

Mr. GAMMELL: I do not wish to raise anything immaterial, but this is a serious point. The member from the North who spoke just now said that if members in the provinces were sufficiently interested in any subject they would attend, and, I suppose, speak and vote upon the matter. On the last occasion when I was in this room, a month ago, the President of the Liverpool Society, I believe, was here to speak. I do not see him here to-night, although precisely the same matter appears on the Agenda.

THE CHAIRMAN: Mr. Eccles is in the Chair at a Special Meeting of the Liverpool Society.

Mr. GAMMELL: Is not that in favour of Mr. Jemmett's remark that that gentleman would be here if he could be?

Mr. SHEPHERD: I suggest that it is not right that this By-law should be allowed to go through without further consideration. I hope it will be referred back for all members to have a chance to come to this room and go thoroughly into the matter.

Mr. C. H. BRODIE [*F.*]: May I point out that there is no revolution at all in what we are going to do to-night? The revolution has been passed—it has been checked. We have been doing something that appears to be utterly illegal, and we come back to the position that we held before the previous By-laws were passed. Nothing that this Meeting can do to-night can by any possibility affect the Charter. We are told by the Privy Council, whose eyes are now open to the fact, that we have been doing an illegal thing and must not continue to do it, and nothing we can say or do to-night can alter that opinion. The Privy Council, of their courtesy, have told us what we may do and what we may not do. We are asked to send forward a provision on the lines they indicate, and I propose that a vote on that point be now taken. It is useless fighting here, trying to get a poll by means of a By-law which the Privy Council itself tells us is not provided for by the Charter.

Mr. WILSON: The Charter ought to have embraced it; it has been remissness that it has not.

Mr. MATT. GARBUTT: A very similar result to that of a poll of all the members can be obtained by a proxy scheme, and it is open to members who feel strongly upon the point to move for a new By-law providing for voting by proxy.

Mr. JEMMETT: In order that we may have power to vote by proxy, I move as an amendment that we draw up a By-law giving members power to vote by proxy in such a way as the Council think fit. I propose that in order to bring the discussion to a head.

Mr. PERCY B. TUBBS [*F.*] seconded.

THE CHAIRMAN: Before putting the matter to the vote I should like to point out that we have been endeavouring for some considerable time to get these By-laws drawn up and approved by the Privy Council at the earliest possible moment, so that we may go on with the scheme of admitting Licentiates and getting the Institute into thorough working order. If this matter is to be referred back to the Council with a view to the bringing forward of a new By-law to provide for voting by proxy, it means further delay. For myself I cannot help thinking that proxy voting would be a dangerous proceeding to embark upon at the present time. I should mention that if the proposals before us are passed this evening, they will have to be confirmed at a subsequent Meeting, so that it is perfectly competent to any members to come here and raise objections at that Meeting, and I am sure they will be closely listened to.

The amendment being voted upon by show of hands was declared lost.

Mr. JEMMETT, rising to a point of order, asked if the majority against his amendment had been sufficient to defeat it.

THE CHAIRMAN stated that the amendment had been defeated by a majority of two-thirds, the proportion required by By-law 62.

The original proposition being put as the substantive motion, Mr. BRODIE pointed out that the last paragraph of the By-law provided that in all cases the voting shall be by show of hands, and a bare majority shall suffice. Did that refer to the confirmatory Meeting only? If it did not, then it was inconsistent with the clauses above which have a side-heading. The matter ought to be made perfectly clear. The CHAIRMAN having stated that the matter would be made clear, the original proposition was put as the substantive motion and declared carried.

THE CHAIRMAN: I have now to put before the Meeting the following Resolution which practically focuses the whole of the business we have done to-night:—That this Meeting having considered the alterations proposed by the Council in the Draft of the Revised By-laws passed at the Special General Meeting of the 21st July 1909 and confirmed at the Special General Meeting of the 10th August, approves and adopts such amendments, with

the exception of that proposed in By-law 24, where the following words should be substituted for those proposed to be omitted—viz. "or who shall take part in any competition as to which the Council shall have declared by a Resolution published in the JOURNAL of the Royal Institute that Members or Licentiates shall not take part"—and authorises that the Draft be revised in accordance therewith and submitted to the Privy Council.

The Resolution was declared carried on a show of hands, and the Meeting proceeded to the consideration of the Revised Regulations for Architectural Competitions.*

The above Resolution was duly confirmed in accordance with Clause 33 of the Charter at a Special General Meeting held Tuesday, 15th inst. [*see* MINUTES].

"Force majeure."

Mr. C. V. Cable, in a letter to the Secretary a few weeks ago, asked for the legal definition of the term *force majeure* in Clause 25 of the Institute Conditions of Contract. "I have always taken it to mean," he says, "something over which the builder has no control, such as the supply of materials or fittings which are specially mentioned to be obtained from certain specified firms and which, by their delay in delivery, have delayed the completion of the building, notwithstanding the fact that they were ordered the moment the details were supplied, and that within three days of the signing of the contract. The case in point is ground-floor stone sills. Am I correct?"

The letter being referred to the Practice Standing Committee, the Committee expressed the opinion that Mr. Cable's interpretation was not correct, and advised the opinion of the Institute solicitor being taken on the question. This has been done, and the result is given in the following letter which has been addressed to Mr. Cable:—

16th December 1909.

DEAR SIR,—The opinion of the Institute solicitor has been taken with regard to the legal definition of the term *force majeure* employed in the Institute Form of Contract. In his opinion the interpretation of the words is expressed by an ordinary definition such as the following:—

"Circumstances or events which no human precaution could have averted or which no fraudulent intention could have produced; and those dangers and accidents which are beyond human power to control or oppose."

Thus, if a contractor agrees to put up a building and is prevented from doing so or delayed in completing his work by reason of earthquake or flood, he could plead *force majeure*; similarly, if an injunction were obtained by neighbours to restrain him from building for reasons not due to his own negligence, this would also be *force majeure*.

The meaning which you ascribe to the words in your letter to the Practice Committee is considered to be incorrect.

If a contractor agrees to supply materials and there is delay in delivery, this is clearly one of the risks of the contractor and certainly does not come within the meaning of *force majeure*. If, however, the employer agrees to supply materials, then delay in delivery would not constitute *force majeure*, but would be a ground for demanding an extension of time for the completion of the contract and possibly damages occasioned by the delay.—Faithfully yours,

IAN MACALISTER, *Secretary*.

* This discussion, which has been adjourned to the 28th February, will appear in the next issue.

R.I.B.A. Sessional Papers in April.

The attention of members is called to the following change in the arrangements for April:—Professor Lethaby's Paper, "The Architecture of Adventure," will be read on the 18th instead of the 4th; and Mr. George Hubbard's Paper, "Architecture on the Eastern Side of the Adriatic," originally fixed for the 18th, will be read on the 4th.

The Housing and Town Planning Act.

During the debates on the Housing and Town Planning Act last Session Mr. Burns intimated his intention of forming a new branch of the Local Government Board, in which would be concentrated the various functions already vested in the Board in regard to the housing of the working classes, together with the important duties devolving on the Department under the new Act. It is now announced that the Treasury have assented to the appointment of the necessary staff, and the new Department will shortly be in working order. It includes a Comptroller with an adequate clerical staff. In view of the important new duties which Parliament has assigned to the central authority in connection with the administration of the Housing of the Working Classes Acts, it has been found necessary to appoint three housing inspectors, who will be concerned, not only with inquiries as to the necessity or sufficiency of housing accommodation throughout the country, but whose services will be available in connection with the inquiries arising out of appeals to the Local Government Board against closing and demolition orders. Such appeals have hitherto gone, in the first instance, to a court of summary jurisdiction, but under the new Act they are determinable by the Local Government Board. In connection with town planning, the Architects' Department of the Local Government Board has been strengthened by the appointment of Mr. Thomas Adams, for many years associated with the Garden City movement.

University of Liverpool School of Architecture.

Mr. W. H. Lever has given to the School of Architecture in the University of Liverpool three prizes of £20, £10, and £5 annually for the best scheme for laying out the land near the church in the centre of Port Sunlight, to provide sites for a village library, and picture gallery, a gymnasium, and a college for higher education. Mr. W. H.

Lever further offers, if he carries out any of the schemes submitted, to pay the author of it £100. These prizes are open to students both in the School of Architecture proper and the Department of Civic Design. The former include in their schemes designs for the various buildings. Mr. Ronald Jones, architect, an old student of the School of Architecture, has given to the school a Travelling Scholarship for this year of £50, to be held at the British School at Rome. To this the British School has added a further £25. With these sums it is hoped that a student will be able to work at the British School for at least six months, and do a piece of restoration work under the Director of the School, similar to that done at the French School, but of smaller scope.

Smoke Abatement.

The Parliamentary Committee of the London County Council recommend that the resolutions passed on the 15th June 1909 with regard to the promotion of legislation dealing with the prevention of nuisance from smoke in the County of London be confirmed as required by sect. 4 of the Borough Funds Act, 1872, as applied by the County Councils (Bills in Parliament) Act 1903.

The resolutions referred to were as follows:—

(*a*) That, as regards nuisance from smoke in the County of London, application be made to Parliament in the session of 1910, to give effect to the following proposals:—

(i.) That sect. 24 (*b*) of the Public Health (London) Act, 1891, which provides that "any chimney (not being the chimney of a private dwelling-house) sending forth black smoke in such quantities as to be a nuisance" shall be a nuisance liable to be dealt with summarily under the Act, should be amended by the deletion of the word "black."

(ii.) That the word "chimney" in section 24 (*b*) of the Public Health (London) Act, 1891, should be deemed to include (*a*) openings through which smoke is emitted from buildings or places in which processes of manufacture are carried on, and the chimneys of any building or place where furnaces are used in operations carried on under statutory powers; (*b*) the chimneys of any Government workshop or factory.

(iii.) That in special cases of nuisance arising under sections 23 and 24 of the Public Health (London) Act, 1891, the proceedings in respect of any nuisance may, at the request of and by agreement with the sanitary authority, be taken by the Council in such special cases.

(iv.) That the power of the Council to take proceedings in respect of nuisance created by sanitary authorities under Section 22 of the Public Health (London) Act, 1891, should be extended to apply to smoke nuisance from electricity or other industrial works, or from premises used for the treatment or disposal of refuse, or for disinfecting purposes, or from baths or wash-houses or other buildings or wharves owned, leased, or occupied by sanitary authorities in which furnaces are used.

(v.) That the power of sanitary authorities under Section 14 of the Public Health (London) Act, 1891, to take proceedings in respect of nuisance arising outside their respective areas should be extended to the Council as regards smoke nuisance arising outside the County of London.

(vi.) That the Council should be empowered to expend such money as it may think expedient, not exceeding £500 a year, for the advancement of measures for the abatement of smoke nuisance.

Proposed New Government Buildings at Pretoria.

The *Times* of the 7th inst., under the title of "A South African Acropolis," gives an account from its Pretoria correspondent of the scheme for the erection of the proposed Government Buildings on Meintjes Kop, the nearest and most conspicuous of the hills which encircle Pretoria. The site, which is hardly more than a mile from the Church Square, the centre of public life in Pretoria, is still bare of human habitation, and would seem to be almost the ideal acropolis of a capital city. The author of the scheme is Mr. Herbert Baker [*F.*], *Ashpitel Prizeman* 1890, with whom the Transvaal Government has been in close consultation ever since Pretoria was selected as the administrative capital of the Union.

Mr. Baker's work (says the writer) is so familiar to every recent visitor to South Africa that it is hardly necessary to explain who he is and what he has done, except indeed to say that General Botha and his colleagues deserve every possible credit for having the strength of mind to make their selection of an architect at once instead of avoiding possible jealousies by the heart-breaking process of a public competition. All the more credit to them because, though it is nearly twenty years ago now since Mr. Baker first came to Cape Town at the suggestion of Cecil Rhodes, he has never quite outlived the South African prejudice against the "imported man." But Mr. Baker has been imported long enough to have left his mark deep on the country already. He is responsible for the modern Groote Schuur—the wonderful adaptation of the old Dutch homestead where Mr. Rhodes lived on the slopes of Table Mountain and where the South African Prime Ministers of the future will have their official residence during the Parliamentary session. He designed the classic temple in Mr. Rhodes's memory which stands on a spur of the hill above the Groote Schuur pine woods. He built Government House at Pretoria after the war, and so many private dwellings that it may be said that a "Baker house" has become part of the indispensable equipment of a South African magnate. The new cathedrals at Cape Town and Pretoria (both half-finished at the present time) are his; and the country is dotted with his smaller churches. With the exception of some additions to the Government buildings at Bloemfontein which were largely destroyed by the disastrous fire of 1908, Mr. Baker has not so far had very much scope for exercising his imagination on the usually prosaic subject of public offices. Possibly his style is too severe and his conditions too exacting to be successful where the choice of a design rests with the committee of a town council or the directors of a bank. But, however that may be, he is certainly the one man in South Africa to-day whose name occurs at once in connection with the public offices of a national capital, and it is not unpleasant to think that the genius which was first recognised by Mr. Rhodes should be devoted to such a work.

Mr. Baker proposes to place two identical blocks of offices on the level ground of the shelf of Meintjes Kop—one at either side of the break—and to link them with a semi-circular colonnade running round the hollow behind them. He suggests that the hollow itself might be converted some day into an outdoor amphitheatre of seats, after the old Greek fashion, where a large gathering of people could be assembled on occasions of national ceremonial. In front and facing the town there will, in process of time, be gardens and terraces and public statues. On the slopes below the shelf will be room for future additional blocks of offices. There is every prospect, too, that the municipality, which (like most of these bodies in South Africa) owns a large tract of "town lands" at the

base of the kopje, will co-operate with the Government by laying it out as a public park. Finally, Mr. Baker has designs on the extreme spur of the kop to the west for a Union monument or "Temple of Peace."

The immediate necessity, and probably all that will be taken in hand at once, is the principal double block of offices with their connecting colonnade. I gather that Mr. Baker's designs contemplate that each block will be of three stories and will contain a partly open courtyard, like the Italian and Spanish buildings, for purposes of coolness. For the same reason, and to produce an effective contrast of light and shade, the main façade will be broken with big projections, while the general scheme of a central amphitheatre with two projecting wings is designed with the same objects. On either side of the central colonnade, that is, on the inner side of each block of buildings, will be a dome. Below the main buildings there are to be solid stone basements pierced with deep arches with the idea of carrying out the design of a capital set upon a rock. . . . The material will presumably be the white stone of the country. . . . The new buildings will face right across the town to the two kopjes with their coping of disused forts which stand like sentinels on either side of the Fountains Valley. The visitor will see them from the first moment of his arrival at the railway station—a prosaic structure which is also, by the way, to be the object of another of Mr. Baker's transformations. They will be visible from Church Square and the present business quarter in the central hollow of of the town. From the "Sacred Hill" itself the visitor looks westward down the Magaliesberg Mountains as far as the great historic Transvaal landmark of Silikats Nek, which is just visible on the horizon, thirty miles away, and southward again along the ridges of the Witwatersrand till they disappear behind the high ground immediately surrounding the town. Pretoria lies just below, spread out like a map at his feet. When the foreground is cleared of its scrub and boulders, and the view of the distant hills is only framed with the white pillars of the colonnade, it will certainly challenge comparison with that to be seen from any capital in the world.

Architects' Technical Bureau.

We are requested to announce that a meeting of this institution will be held in Bloomsbury Hall, 24 and 25 Hart Street, Bloomsbury, on Wednesday, 23rd February, at 8 o'clock, for the consideration of the Standardisation of Catalogue and Trade Literature, for the more convenient handling and reference by an architect than is at present possible. Members of the Institute are specially invited to attend.

The late J. M. Swan, R.A.

The death is announced, at the age of seventy-two, of Mr. John MacAllan Swan, R.A., LL.D., the well-known sculptor and painter of animal subjects. Mr. Swan was trained at the Worcester School of Art, and afterwards at Lambeth, under Mr. J. L. Sparkes. He afterwards went to Paris, studying first under Gérôme, and then under the late Bastien-Lepage and M. Dagnan-Bouveret. He also worked at sculpture under M. Frémiet. He first exhibited in the Academy in 1878, and was elected A.R.A. in 1894 and R.A. in 1905. Mr. Swan was an occasional visitor at the Institute, and at one of its General Meetings in 1906 read a Paper on Metalwork [JOURNAL, 27th January 1906].

ALLIED SOCIETIES.

Leeds and Yorkshire Architectural Society.

On the 10th February, before a meeting of this Society, Mr Raymond Unwin delivered a lecture on "The Planning of Suburbs," illustrated by an extensive series of views and plans of the Hampstead Garden Suburb and typical examples of town planning abroad. Mr. Unwin said that the successful setting out of such a work as a new city would only be accomplished by the frank acceptance of the natural conditions of the site; and, humbly bowing to these, by the fearless following out of some definite and orderly design based on them. To straighten a river, level a hill, fill up a valley, or even cut down a fine clump of ancient trees, to make the site fit some preconceived design, would be presumptuous folly. Such natural features should be taken as the keynote of the composition; but beyond this there must be no meandering in a false imitation of so-called natural lines. Let our avenues be straight or boldly curved, not aimlessly crooked; and let our open spaces be not shapeless patches, but squares, circles, or other orderly forms. The glittering path of the river as it winds across the plain, or the slope of the mountain range standing out in silhouette against the sky, delight us indeed; but the inconceivably complex conditions which form these curves have no part in any work of ours, and, in attempting to mimic them, we but miss that beauty of orderly design for the creation of which alone power has been given to us.

Taking the Hampstead Garden Suburb by way of illustration, one can see the importance of carefully studying the site, preparing a survey of the trees and other features on the land, together with a contour plan, before attempting to lay it out. The convenience of access to certain points such as the railway station, drainage facilities, proper gradients for the roads, etc., will indicate generally the lines which the more important ones will take, while the cutting up of the land into the building plots of suitable sizes, with due regard for economy in length of road and proper consideration for the aspects of the buildings, will determine in a general way the lines of many of the building roads. The preservation of the outlook across any open space available should be considered.

Having, in a general way, determined all these factors, the problem becomes essentially very much one of the exact lines and arrangement of the roads, together with the building lines, and the placing of the buildings must be determined primarily on architectural grounds to secure satisfactory street pictures, whether of a picturesque or more dignified and architectonic character. In dealing with areas devoted to cottages, economy in roads is the first consideration. At Hampstead, by means of a special Act of Parliament, power was obtained to make roads limited to 500 feet in length, of a width of 20 feet, provided the houses on each side were not less than 20 feet apart. As justifying the granting of this privilege the Trust bind themselves not to build more than an average of eight houses to the acre over the whole estate.

The passing of the Town Planning Act affords an opportunity, probably for the first time, for controlling the character of suburban development, and it will be the duty of architects in future to regard their buildings as parts of a total picture rather than as isolated units. At the same time an immense opportunity will be afforded for considering streets and areas as a whole,

and for producing architectural grouping on a large scale. If wise use is made of the powers given in the Act, and if the citizens, and especially if the architects and surveyors will co-operate, it may be possible to stop the devastation going on round all our large towns, and begin to build up suburbs worthy to be the homes of the people.

COMPETITIONS.

Secondary School at Peterborough.—Members of the Royal Institute are advised that the Competitions Committee are in communication with the promoters with a view to the amendment of the conditions of this competition.

Public Elementary Church Schools, Bromley, Kent.—The following architects have been invited by the trustees and managers to submit designs in a limited competition for these schools to be erected at Mason's Hill, Bromley:—Mr. H. W. Burrows [*A.*], Mr. Evelyn Hellicar [*A.*], Mr. H. R. Latter, Messrs. Russell [*F.*] & Cooper [*F.*], Mr. C. H. B. Quennell [*F.*] The assessor appointed is Mr. H. P. Burke-Downing [*F.*].

Public Library, St. Albans.—Mr. A. W. S. Cross [*F.*] has been appointed to act as assessor in this competition.

Oldham Town Hall Extension.—Mr. G. H. Willoughby [*F.*] has been appointed to act as assessor in this competition.

MINUTES.

Special General Meeting 7th February 1910.

At a Special General Meeting, summoned by the Council in accordance with Clause 33 of the Charter, held Monday 7th February 1910—Present, Mr. James S. Gibson, *Vice-President*, in the Chair; 25 Fellows (including 2 members of the Council) and 15 Associates—the Minutes of the Special General Meeting held 10th August 1909 [JOURNAL, 28th August] were taken as read and signed as correct.

The Chairman announced that the Meeting was called (1) to sanction alterations in the draft By-laws, and (2) to discuss the Revised Regulations for Competitions.

The various alterations in the draft By-laws being put from the Chair as printed in the notice-paper and voted upon separately, it was

RESOLVED, that the alterations proposed in the draft By-laws 1, 2, 4, 7, 13, 14, 25, 26, 30*a*, 32*a*, and 58 be agreed to; that in By-law 24 the following words be substituted for those proposed to be omitted, viz. "or who shall take part in any competition as to which the Council shall have declared by a Resolution published in the JOURNAL of the Royal Institute that Members or Licentiates shall not take part"; that the proposed new By-law be inserted after By-law 35; and that By-laws 45 and 63, as printed in the draft, be omitted.

On the proposal to substitute a new By-law for the draft By-law 65, an amendment, moved by Mr. A. R. Jemmett [*F.*], and seconded by Mr. Percy B. Tubbs [*F.*], that a new By-law be inserted giving members power to vote by proxy in such a way as the Council think fit, was negatived on a show of hands.

The original proposition—that the proposed new By-law be substituted for By-law 65—was then put from the Chair and agreed to.

Finally, it was

RESOLVED, that this Meeting having considered the alterations proposed by the Council in the draft of the revised By-laws passed at the Special General Meeting of the 21st July 1909 and confirmed at the Special General Meeting of the 10th August, approves and adopts such amendments, with the exception of that proposed in By-law 24, where the following words should be substituted for those proposed to be omitted—viz. "or who shall take part in any competition as to which the Council shall have declared by a Resolution published in the JOURNAL of the Royal Institute that Members or Licentiates shall not take part," and authorises that the draft be revised in accordance therewith and submitted to the Privy Council.

The Meeting proceeded to the consideration of the Revised Regulations for Architectural Competitions, and after several members had spoken, the consideration of the matter was adjourned on the motion of Mr. W. Gilmour Wilson [*F.*], seconded by Mr. A. Saxon Snell [*F.*].

The proceedings terminated at 10 P.M.

Ordinary General Meeting, 14th February 1910.

At the Eighth General Meeting (Ordinary) of the Session 1909-10, held Monday 14th February 1910, at 8 p.m.—Present: Mr. Ernest George, A.R.A., *President*, in the Chair; 36 Fellows (including 10 Members of the Council), 32 Associates (including 1 Member of the Council), and numerous visitors—the Minutes of the Meeting held Monday 31st January 1910 having been published in the JOURNAL, were taken as read and signed as correct.

A Paper by Mr. Edward Warren, F.S.A. [*F.*], on the LIFE AND WORK OF GEORGE FREDERICK BODLEY, having been read by the author and illustrated by lantern slides, a discussion ensued and a vote of thanks was passed to Mr. Warren by acclamation.

The proceedings terminated at 10 P.M.

Special General Meeting (By-laws), 15th February 1910.

At a Special General Meeting, held in accordance with Clause 33 of the Charter, on Tuesday 15th February 1910, at 5.30 p.m.—Present: Mr. James S. Gibson, *Vice-President*, in the Chair; 31 Fellows (including 7 Members of the Council), 8 Associates (including 1 Member of the Council)—the Minutes of the Meeting held Monday 7th February were read and signed as correct.

The Chairman, having explained the purpose of the meeting, moved, Mr. Henry T. Hare, *Hon. Secretary*, seconded, and it was

RESOLVED, unanimously, that this Meeting, summoned in accordance with Clause 33 of the Charter, hereby confirms the Resolution passed at the Special General Meeting of the 7th February—viz. "That this Meeting having considered the alterations proposed by the Council in the Draft of the Revised By-laws passed at the Special General Meeting of the 21st July 1909 and confirmed at the Special General Meeting of the 10th August, approves and adopts such amendments, with the exception of that proposed in By-law 24, where the following words should be substituted for those proposed to be omitted—viz. 'or who shall take part in any competition as to which the Council shall have declared by a Resolution published in the JOURNAL of the Royal Institute that Members or Licentiates shall not take part,'—and authorises that the Draft be revised in accordance therewith and submitted to the Privy Council."

The proceedings then terminated.



FLORENCE, 1853. A. Waterhouse, R.A.

FIVE LETTERS TO A YOUNG DRAUGHTSMAN.

Being in substance identical with a Lecture delivered to the Camera and Sketching Club of the Architectural Association and to the Manchester Society of Architects.

By Paul Waterhouse [*F.*].

[I have allowed myself to illustrate the following letters by reproductions of a few water-colour drawings by my late father, Alfred Waterhouse, R.A. There is a special sense in which they are allied to the subject which I have endeavoured to emphasise. They are all the work of one who drew for drawing's sake and who realised more than most men the *immediate* pleasures of the very act of draughtsmanship. I do not mean that the question of achievement was nothing to him; indeed his work was so felicitous that it very seldom happened in my knowledge that any drawing had to be torn up or thrown away as hopeless. Hand and eye were very sure of their aim. The scope of the drawing, its intended extent, its intended tone, were not often changed after the start. Failure, in fact, was with him no frequent trouble, though often and often I have known him at the end dissatisfied. But with every page that he covered there came the true zest of the keen workman. The joy was in the doing more than in the thing done. It was like the ardour of a sportsman, a living, self-satisfying energy which is in itself for the time the whole human development—in a word, happiness.—P. W.]

I.

My dear John,—

Plenty of friends will have given you advice about the dignity of your profession. Heaven forbid that I should write to you on such a subject! Dignity is never interesting, and the very word "profession" repels any but professional thoughts. What I want to discuss with you is the inner aspect of the secret society of draughtsmen to which you and I each in a modest way belong. Why "secret society"? I will tell you in a minute.

Do you remember that story of the two commercial travellers who passed through Oxford in an express train? One of them who knew the route jerked his thumb towards the window, and, by way of informing his companion, said "That is Oxford—the place where the man was born who invented the small-tooth comb." The people of Oxford, as you are aware, are a somewhat intellectual group. They have, I find, no mean opinion of their town. They hold,

indeed, that the place is a famous place, and have fairly strong ideas as to the basis on which that fame is built; but, as far as I can ascertain, there are few—very few—who connect their corporate and historic greatness with the inventor of the small-tooth comb. Which things are an allegory. Lookers-on, we are told, see most of the game. It is therefore *possible* that the sound explanation of Oxford's greatness is that which connects it with the creator of combs; but you will agree that, from the purely local point of view, there is a good deal of excuse for the Oxford worthies who, in the privacy of their own pride, see entirely other reasons for their existence and other interests in their life.

Depend upon it, my dear John, these commercial travellers are for ever passing by and for ever labelling the claims of other places, other societies, than Oxford. Every group of men united to one another by a common interest is viewed by these itinerant outsiders in a light quite other than that which illuminates their own enthusiasm; and it is inevitable that this should be so. An explanation of Oxford's own ideas of Oxford's significance would, perhaps, hardly arrest the attention or the interest of those who are satisfied with the simpler theory which connects it with the small-tooth comb. In fact they would consider it and call it (not too politely) "rot." Therefore, we may expect that what you and I have to say to one another about our own little world may commend itself to the world at large as being, if not "rot," at least a wonderful fuss about nothing at all. Did you hear what Mr. Arthur Rackham said last January, among other brilliant things, at a dinner of the Authors' Club? He was talking boldly and well of the merely accidental relationship which the true value of a picture bears to its imitation of nature, and said "The greatest artist is, as a rule, the man with the finest taste in making mountains out of mole-hills, in giving things their due disproportion." Let us for a while make at least a respectable hillock of our own little mound.

I don't profess to give you drawing lessons, or even hints on drawing. Merely do I wish to insist that there are certain pleasures and interests peculiar to our secret society, and shared even by those whose powers of performance are furthest from maturity or success. I call ours a secret society not because we are under oath to keep our secret to ourselves, but for another reason. It takes two to let a secret out—a teller and a receiver—and the secret may be kept either by the continence of the holder or by the incapacity of others to receive. With us it is the deafness, blindness, and indifference of surrounding mankind that shut our secret in more securely than any pledge of ours against revelation.

Have you ever considered to what a strange extent men (particularly good and respectable men) live in the future—take their pleasures, in fact, by anticipation rather than by fruition? This morning at breakfast you were probably either slightly gloomy or appreciably cheerful. Let me assume the latter. If you had asked yourself during breakfast what it was that made you happy, you would have admitted that it was not the present enjoyment of bacon and coffee, but the prospect of some new bit of work, or some coming interest, some future meeting with a friend, some game arranged for, or some expected gift. This is all as it should be, for the man who could start the day by so revelling in his morning provender that the light of the revel shone from his eyes would be a poor creature indeed; but you will find that this anticipatory radiance goes on at nobler times than meal-times and often supersedes some personal happiness which ought for the time to be having precedence. Still more is this the case with anticipatory gloom. The apprehension of some discomfort in the future—possibly a very small and very problematic annoyance—will override with most cruel tyranny a space of time that should be one of self-realising pleasure. The occasions on which a man says to himself "Now I am practising conscious enjoyment" are at least rare, and are often ignoble. But there is one good instance of a noble exercise of conscious present fruition in the hearing of music. The music-listener can invariably test his power in this direction clearly and incontestably by asking

himself " Am I dreading the end of this, or am I indifferent; or, again, am I really ready for the end to come?" If the end is a thing feared, then he has enjoyment—real conscious present enjoyment tempered only by that pain of the impending end which is no bar to the pleasure but only a stinging stimulus. (I really am coming to the subject of draughtsmanship in my own good time; you must give me my head a bit longer.)

Dr. Johnson saw this aspect of human affairs very clearly and, with characteristic disregard of exceptions, said boldly that " no man was consciously and presently happy except when he was drunk." Boswell, with whom this dictum did not go down, waited his opportunity for refuting it. The opportunity came when he and his friend were speeding one day from St. Albans to London in a swift post-chaise—enjoying, in fact, what a 40-h.p. motor can provide for our generation. " Surely, sir," said Boswell (I don't profess to quote literally), " you will admit that present immediate enjoyment is to be had in the actual moments of an experience like ours to-day ? " " No," said the philosopher, " for even in the pleasure of flight man is hurrying from something or to something."

The truth is that this everlasting looking forward is a kind of by-product of Christianity, and has become a habit of the well-ordered mind. But it is only a by-product, and we must not unduly sanctify it. *Nihil est temporis nisi nunc quod est finis præteriti et principium futuri.* Here is a wise man's statement about the present. You may translate it, I suppose, to mean that no portion of time can be said to exist except *now*, which is the end of the past and the beginning of the future. Having gone that length in definition of the elusive present, you may, if you are a pessimist, decide that there is nothing to be made of such a razor-edged possession; you may, in fact, conclude that memory and hope are the only possible spheres of man's activity, a conclusion which is perfectly logical and, as it happens, perfectly false. Here, it is true, we have no abiding city; but it is equally true that now is the accepted time, equally and gloriously true that Time is a bit of Eternity. People talk and think of eternity as if it were time spun out to portentous and inconceivable length. Surely it is nothing of the kind. If you wish to express eternity in terms of time, it is time compressed into one single unmoving, undying moment. Meanwhile, hurrah for mole-hill industry!

I am, dear John, your affectionate UNCLE.

II.

. . . You say my letter has practically nothing in it about draughtsmanship. Do be patient! If you will keep the letter till the next arrives you will, maybe, see a connection, maybe not. But, anyhow, beware of the commercial travellers and their philosophy. . . .

III.

MY DEAR JOHN,—I agree with you that it wouldn't be a bad idea to " come to the point." Here it is. The draughtsman's craft is pre-eminently an example of a noble and innocent human exercise which gives, or should give, those who engage in it present conscious happiness. It should give them, in fact, that power to prolong the razor-edged Nowinto an appreciable taste of eternity.

Some years ago, for love of Alberti, I went to the church of San Pancrazio in Florence. What a different meaning and vision " San Pancrazio " calls up from that which accompanies " St. Pancras "! But I mustn't go into that now, though it would illustrate very prettily the difference between an Italian idea of drawing as a human occupation and ours. My only parenthesis here shall be to remind you, if ever you get the chance of buying the 1546 edition of Alberti's *Architecture*, to do so. It is a pretty Italian version beautifully printed in Venetian italic.

The church of San Pancrazio was, I found, mainly converted into a tobacco factory, but there remained undisturbed the portion which contains a shrine of marble on which a Latin inscription declares that it is the express image of the Holy Sepulchre at Jerusalem. Let it suffice to say that it was Alberti's vision of that sacred tomb—that it was beautiful, and that I



MODENA, 1853. A. Waterhouse, R.A.

wanted to draw it. To enter the church the key had to be begged of a cobbler over the way. He let me in with all my drawing things; he understood my errand, and he wished me "*Buon studio*"—not success, not good luck to my drawing, but "*buon studio*," good study. I have often thought of that utterance since. Drawing is an end in itself. Achievement is something, but not everything. The man who draws only with his eye on the result, who neglects the happiness of the process, is missing something which no wise man should miss. I am convinced that the draughtsman who does not reap his happiness as it comes is letting slip a precious thing.



A. Waterhouse, R.A.

BORDEAUX, 1872.

But, you will say, we are not always happy over that process: the very fact that we sometimes begin to realise half-way through an effort in draughtsmanship that the result is going to be not a work of art but a triumph of disappointment produces a depression complete enough to drive away all happiness.

I admit the fact. Nobody knows more of it than I. You are quite right, John, an abortive drawing is a thing that makes its producer sad. But this should not be. Please understand I am now speaking not of architectural design, nor of drawings intended for sale or reproduction,

but of study drawings—of drawings in that class which we generally and rather erroneously call sketches. In these there should be no undue craving for achievement. The man who can sit down to a drawing without realising that he is entering a realm of pleasure is like one who takes his dinner without saying grace. The sportsman—shooter, golfer, or what not—is, as we know, and he knows, out in search of health and exercise; but you cannot well persuade him of that: the bird to be shot, the hole to be won—those are his objects. The draughtsman is of a calmer spirit; there is at least a hope of persuading him that his quest is not only a perfect achievement, but also a perfection in the gradual achieving, or even, if that may not be, a peaceful joy in a struggle for the unattainable. There is a temptation, when achievement fails, towards a lowering of the standard aimed at. We all know this. We all know the man (this is sometimes self-knowledge) who, baffled by greater subjects, takes to filling his notebook with carefully disposed minor triumphs that dot the page in easy profusion. That is not the right game. Stick to your high aims.

Let me give you an imaginary illustration. You have in some cathedral town gone forth with pencil and paper to the great building which is the glory of the place. "This," you have said at once, "is not for me. It is too vast, the labour of it is too great. Think of failure on so large a scale! I will draw some small feature—that niche, that capital, or at most one doorway." But a shower comes on and you take flight; for a draughtsman dreads rain like any bricklayer or cricketer (why are bricklayers so fearful of rain?). You enter and take a seat by the font. "This is worse," you say; "this great cave of intricacy is of no good to my sketch-book. But there is at least the font, I will try that." You start your font, but the light in that dim corner is not good, and you feel vexed that even the smaller things evade your powers of accomplishment.

But what is that? Music! It is the organist; he plays you know not what—some wild dream of strength that sets you tingling with the pulses of a conqueror. You tear the top sheet off your block; you forget that you even own a piece of indiarubber; you take no heed of failure, but start—have already started—on the enterprise of your life. You are, before you know it, drawing—nay, dashing at—the whole scene before you. Bold lines of unerring perspective fling themselves on to the paper, darting with their mysterious magic to that point on the altar, widening, ever widening, above your head. You who cannot manage groining have thrown vault and lierne in ordered intricacy across the roof of the great nave. Those windows in the chevet, if they are to show as windows, must have round them a blackness of the densest; yet into that blackness even you have got some detail of shaft and cap and springing ribs. Between the piers of the nave you have thrown in at least a hint of the vaulting of the aisles, and the whole page is beginning to grow into a living picture. Figures you know you cannot draw, yet somehow you have covered the sanctuary floor with a whole procession, part dark against that splash of sunshine on the quiet wall, part bright against the shadow, the leading cross left white on a pool of gloom.

Your morning's work is over and you return to your hotel. Perhaps, when you take out your sketch and look at it, it appears a poor thing compared with the vision you put into it at the time; but what of that? That "crowded hour of glorious life" has been yours and is yours still; and what have you gained? Memory certainly; a memory of that building which no other process than half-a-day's drawing could have stamped on your mind. But, more than that, you have been in spirit with the men who built the church. That exaltation of yours was no delirium but an ecstasy of the kind that makes mere men into prophets and poets. That fervour was the building's own. It entered you, you entered it, and have been for a while with the men of old. Such communion is no mere luxury of the mental sensualist but a spiritual experience which lies deep in the very nature of art. For art, if you will believe me, is of no significance apart from its roots in

the bygone ages. In a brand-new world of fatherless beings no art would be possible; for art only exists in relation to its own past.

What would the commercial travellers say of all this? Even you will think I have been rather busy with the mole-hill this morning.



ST. SERGE, ANGERS, 1865. A. Waterhouse, R.A.

IV.

My dear John,—I promised you that I would say something to you about actual architectural drawing. I mean that class of drawing which we call design, the drawing which results, or may result, in a building. You will often be reminded that such drawing is only a means to an end, that the function of an architect is to reproduce not drawings but buildings, and that therefore mere skill in draughtsmanship is apt to be not only beside the mark but even an actual snare.

Don't listen too much to this talk ; there is a good deal of truth in it, truth of an unimportant and rather deceptive kind. You may depend upon it that there are few human occupations more beautiful, noble, and harmless than that of architectural drawing. The joy in the actual process which we have noticed in other kinds of drawing is by no means absent here. But it is

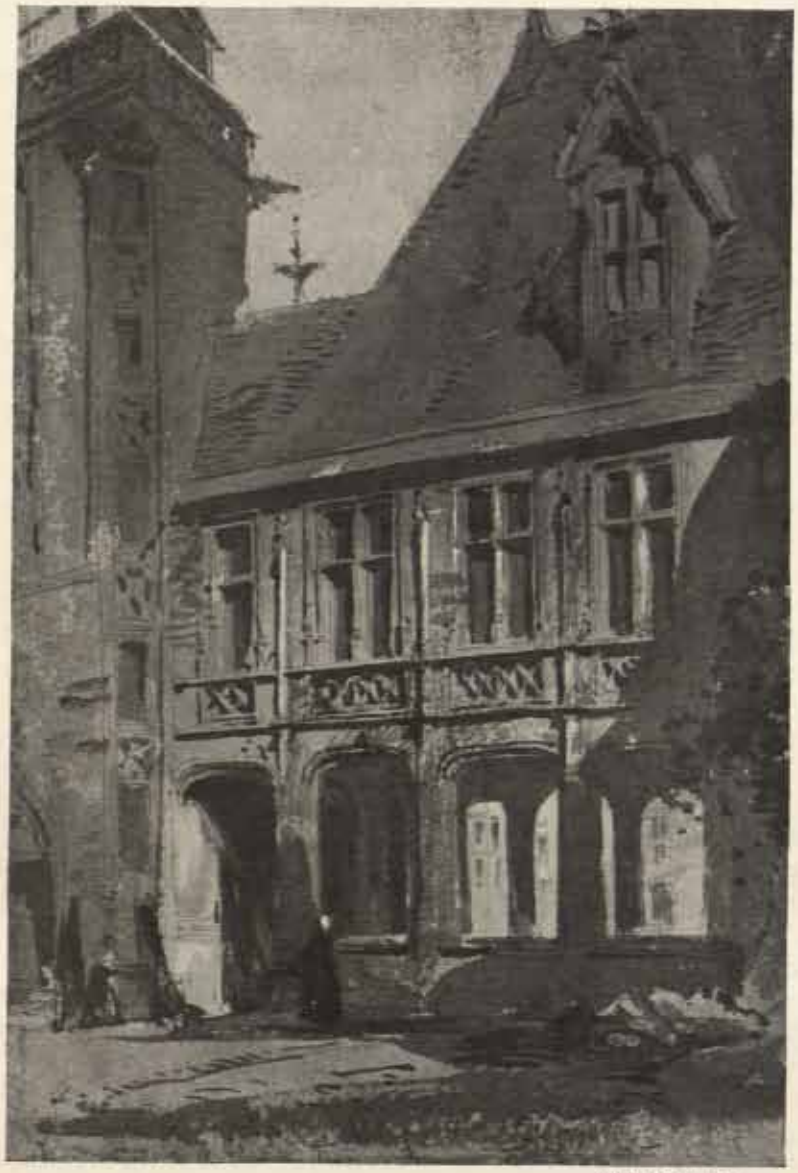


A. Waterhouse, R.A.

SENLIS, 1863.

not of this I want to write now. The practice of architectural drawing—I say this without fear of contradiction—is the only true basis of architectural appreciation and architectural criticism. In other words, no man can enjoy the products of architecture, ancient or modern, without having had at least some training in architectural drawing. You will answer at once that there are plenty of cultured amateurs, men and women, whose enjoyment of architecture is very full and very genuine, but who have never laboured with tee-square and board. Your answer doesn't

overthrow me in the least. There are in all ancient buildings a great many elements beside architecture, all of which are capable of arousing a perfectly worthy form of human intellectual interest. The cultured ladies of whom you are thinking will, Ruskin in hand, seize a day's enjoyment from the west front of Amiens; they will also, without Ruskin's aid, enjoy the dear little birds



A. Waterhouse, R.A.

THE HOUSE OF JACQUES COEUR, BOURGES, 1865.

carved among the foliage of the capitals and the monks and devils beneath the stall seats. They will perhaps become enthusiasts on glass, on tiles, or even more learnedly on mouldings. Your friend the parson will be full of dates; he will know to a nicety whether such and such a base is Early English or Transitional; he will possibly be the greatest living authority on hagioscopes, and very likely has at home some notes on præ-Norman towers which will be well worth your own

study. But, bless you, all these things are not architecture. Archæology, history, the power to know a major prophet from a minor poet when carved in mediæval stone, the zest for fauna in foliage, the quest for demons in oak, love of ecclesiology, even a passion for dates, are none of them identical with the simple and rare power to tell good architecture from bad. Architecture is only to be seen in terms of the drawing-board. No man can possibly appreciate architecture without understanding it; this is obvious. And no man can understand any building who does not by imagination see that building in plan, section, and elevation.

For one thing there is a special beauty of elevation, another of section, and another of plan. Your non-draughtsman amateur sees the perspective only—a kind of photographic view. He has no thought for the fair show which that chevet would make on plan; he reeks nothing of the exquisite sectional harmony between those flying buttresses outside and the internal vault above your head. That niche is a mere vertical wall ornament to him; to you it is a horizontal scoop in the wall, and you are wondering how the space for it was spared and how it fits into the surrounding solids. I could multiply these examples till you were tired of them, I will only offer you one more. You know the charm of balance in an eighteenth-century mansion. That balance —the answering of wing to wing, of window to window—is not always clearly seen in the casual *coup d'œil*, but it is traceable by yourself, and you enjoy it as a beauty of plan, even though you may never have seen it in the form of elevation.

There is another and very curious development of this power of ours to see buildings in terms of the drawing-board. We are willing and even eager when looking at a building to leave certain things unseen. The most usual example of this is the case of a building in a street which rises higher than its neighbours, and consequently has on each side of it a plain, designless wall rising up in strange contrast to the careful composition which adorns the front. An unarchitectural critic seeing the building obliquely is afflicted by the poverty of those bare flanks; to us they are invisible. This power of ours to don the blinkers when looking at a fellow-craftsman's work has its dangers. True it is that the poor fellow who designed the street building with the bald party walls had no power to do otherwise, and our lenience towards him is no more than a charitable exercise of the civility which we hope he will extend to us in like case. But the indulgence may be carried too far. We are willing, for example, to ignore the presence on a well-designed front of some inevitable waste pipe; but no designer should presume too freely upon this. The architect who is so thoughtless in planning as to place the sanitary exigencies of his building against the wall which he means to design as a colonnade of Ionic pilasters has only himself to thank if some ungenerous *confrère*, looking for the nonce with the eye of a common man, elects to see that there really is a leaden tube of sinister import racing an antisyphonage pipe up the façade, calling for orders at every floor, and finally vaulting in an inelegant bend round the *cyma recta* at the top. There is an article in some back number of the *Architectural Review* by Mr. Arthur Street—most thoughtful of writers—on the things that are thus left unseen. I forget its title, but if you ever find it, read it.

One more thought and I will finish this letter. When I was a pupil we used to be made to draw diagonal sections of mouldings, such as those on the base of a statue, to make sure lest in designing what looked well in straight sections we should produce a result which was offensive at the mitres. In after experience I have come to the conclusion that this precaution was a mistake, and that it even led to an undue timidity in projection. I will tell you why. The human eye is not a glass hole in the head, but a terribly rational organ. It practically never sees a diagonal development of a moulding as such. What it sees and understands is that a moulding with which it is pleased is at a certain angle meeting the same moulding and producing the only possible and logical result of such a meeting.

If you want to prove this to yourself, draw out with extreme accuracy a normal Ionic capital

with its appropriate entablature in diagonal section. The result is hideous, but the real thing seen obliquely is one of the most perfect products of our perfect art. The diagonal section precaution is in fact a bogey. The eye expects these diagonal exaggerations as a necessary complement of the traditional mouldings which it loves, and you can prove this again in more ways than one. The cornice of a circular colonnade, if designed on normal lines, always looks insufficient, and again a bit of entablature, which for one reason or another butts against a wall



PADUA, 1853. A. Waterhouse, R.A.

at each end (as, for instance, a verandah cornice between two projecting wings), always looks mean. And why? Simply because those diagonal developments are missing.

Two exceptions only do I know to this rule. Chimney-stacks, or other objects which are wont to be seen in monotone silhouetted against the sky, cannot always carry the projections which are pleasing in true section. That is one exception. The other is this. Pleased as the eye is with the elongation of form produced by right-angled contact, it cannot brook an acuter union, and that is why (as well as for certain masons' reasons) the stringcourses on the Triangular Lodge at Rushton break forth into escutcheons in lieu of mitres.

V.

Yes, John, this really is the last of the letters on draughtsmanship. After it you and I will correspond with one another on terms which allow for the possibility of there being other objects in life. But for the moment we will engage in adding one more thousand feet of altitude to our own little mole-hill.

The very commonness of drawing blinds us to its magic. You and I both belong to families in which the earliest demand in the nursery has been (after food) for "pencil and draw." It seems to you and me a natural and simple thing to depict objects by black lines, and we probably as children shared the children's view that the progression to paint or chalk was an advance in the sublimity of our art. But imagine, if you can, a cultured civilisation from which for some reason draughtsmanship has been withheld. Into this civilisation steps a being who has the bold idea that the solids around him might be represented in what he calls pictorial form. If this enthusiast were to inform his hearers that in his opinion the many coloured phenomena in three dimensions which meet our eyes might be intelligibly transcribed in one plane and in two colours only, what do you think his civilised companions would say of him? If they had already discovered photography, they might have at least a glimmering of his meaning. If not, they could only touch their foreheads and say "Poor fellow!" Sculpture is child's play to black and white draughtsmanship. Draughtsmanship, I tell you, is a miracle—a marvel.

Now let me finish these ramblings by a few words more on what most concerns us—the drawings which make architectural design. Pay no heed, I say it again, to the man who tells you that draughtsmanship in architectural design is only a means to an end. Can't you see that there is a fallacy in the statement that the architect's real business is to produce buildings, and that the drawing is merely an unavoidable incident in the process? It's true, of course, but fallacious. Can I not dare to say to you that the reverse is equally the truth—that the stone and brick affair is only the means to the realisation of the drawing?

Put it, if you will, this way. Here is a set of drawings for a building. Here are also a specification and a nicely bound bill of quantities. What more is wanted for the architectural issue? A cheque for £20,000. Very good. Now I am going to ask you which of these ingredients you would most readily accept from me as a present. You will at once decide that neither the specification nor the bill of quantities is a desirable thing as an isolated possession. There remain that roll of drawings and the cheque, which will you have? You say the cheque. I thought you would.

But now will you reflect that the cheque is only a kind of front elevation of a thousand score of sovereigns? And those sovereigns themselves are only moderate specimens of basso-relievo. Their value after all is only as symbols transmutable into something else. But that design; what is it? A thing above money, a thing eternal. It is translatable, if you will, into brick and stone, slate and timber; but a careless housemaid with a match could reduce that translation in one night to a few cartloads of dry rubbish, and what would remain? Of the house nothing; of the design the immortal possibility of resurrection.

What's that? "The drawings might be burnt too." So they might. John, you are intolerable.

TOWN PLANNING.

PAPERS COLLECTED BY THE R.I.B.A. TOWN PLANNING COMMITTEE.

XII. THE PLANNING OF TOWNS AND SUBURBS.

By Raymond Unwin.

The difference, from the town planner's point of view, between Garden Cities and the extension of existing towns on similar lines which may be called Garden Suburbs, is chiefly that in the case of new towns laid out on agricultural land, as at Letchworth, the site alone has to be considered, whereas in the case of new suburbs, the tradition, historic associations, and the individuality of the town itself must be taken into account. In the latter case the main centre of the town will be already fixed, and supplementary centres only will need to be planned in due relation to it; whereas in the designing of a new town it is of first importance to fix the site for the main centre.

One of the difficulties of developing a new town in accordance with the plan arises from the fact that the central area devoted to the larger municipal, religious, recreational, and business buildings would be one of the last to be built up; that in fact the town will grow chiefly from the outside inwards.

There is consequently considerable difficulty in preventing such a concentration of the early industries and activities of the town at some subsidiary point as will be likely to divert the centre of the town from the place originally contemplated.

As a supplementary centre only would be needed in a suburb, it is less difficult to secure its development in the position intended, provided that position is well chosen.

The principles governing the planning and arrangement will in detail apply equally to a town and a suburb. The town planner must begin by a very careful survey and study of the site and the existing conditions. Such survey in the case of town extension must include a study of the sociological conditions of the existing town, its historic associations and actual past growth, and would require that maps should be prepared showing the distribution of the population, its density in different parts of the town, the general lines of its ebb and flow during the day, indications of the direction in which natural growth is likely to take place, particulars of existing transit facilities, water supply, drainage, and many other matters. Much of this information should be collected for the town planner, but he will need to see that he has it for reference and guidance. In addition to this he will need to study in a technical manner the conditions of the site. His survey, which should include all the main trees on the site and any exceptionally fine hedgerows, and spots of ground having particular historical associations, special beauty or possibilities attaching to them, should also comprise the making of a contour plan showing accurately the levels of the site, the contour lines indicating variations in height of from 5 to 10 feet, according to the nature of the ground. Levels thus graphically shown are indispensable to the proper working out of a site plan even for a small estate. In addition to the contour plan, and easily made from it, a model would often be of great assistance.

The town planner's function is to provide a form of expression for the expanding life of the town which shall minister to the convenience of that life, shall be thoroughly incorporated with the site over which development is to spread, and shall at the same time result in as great a degree of beauty as may be consistent with the conditions of life prevalent. It is not his function merely to impose some preconceived ideas of his own; but having mastered the conditions of the site, and the life that is to occupy it, the privilege is his to determine the form which will, within these limits, give the most satisfactory expression to the growth of the town, most genuinely carry on its past traditions, and most completely maintain the desirable features of any individuality which it may have already developed. Town planning, to be successful, must be the outgrowth of the conditions, not an artificial scheme running counter to or thwarting the natural tendencies of growth. Within the limits thus prescribed there is ample scope for the designer's work. Having completed his own survey of the site and mastered the results of the wider survey, the designer will first determine what opportunity will occur for the creation of a centre to his town, suburb, or site, and choose the most fitting place for it. This settled, he must consider the main framework of roads and the connection of these with existing highways and traffic centres, such as railway stations, bridges, docks, recreation grounds, &c.

Roads fulfil two main functions and should be considered from two points of view: firstly, as avenues of intercommunication, and secondly, as affording sites for buildings. The relative importance of these two functions will vary greatly, some roads existing almost solely for the purposes of opening up building sites, while with others the traffic considerations must be paramount. Facility for traffic requires width in proportion to the number of vehicles, easy gradients, directness of line, and the avoidance of sharp corners or acute angles;

it requires, also, some open space where more than two roads meet; and where possible the line of vision at corners should be kept open so that the drivers of vehicles coming along the two roads can see one another some distance before arriving at their natural meeting point.

The question of the best form of road junction will depend very much on the probable density of the traffic. The German school of town planners, particularly those who follow Camillo Sitte, advocate that, as far as possible, the junction of more than one road with another at any point should be avoided. It may be shown by diagrams that the possible number of collision points increases very rapidly with each additional road coming into a road junction. Herr Stübben shows that some of the published diagrams on this point exaggerate this increase. Moreover, such diagrams fail to take account of the human element in the problem. So that, in spite of their showing, it may be more convenient and less dangerous to have certain focal points in the system of roads where the danger of the road junction will be sufficient to induce all drivers to draw up and proceed cautiously, and where, if necessary, police supervision may be provided, rather than to have a multitude of single junctions where the risk, though considerable, would not justify police supervision or ensure proper caution on the part of all drivers. For such vehicles as motor-cars and trams every junction and every turn at right angles must be a source of difficulty and danger, and it would seem better that they should be able to take direct routes from point to point, and that at these meeting points ample space should be provided for the proper circulation and distribution of traffic. Such focal points and spaces are, however, very difficult to treat satisfactorily from an architectural point of view, and, except as required to facilitate traffic, are perhaps not desirable.

When roads are considered from the other point of view, as affording sites upon which will eventually be built up groups of buildings, we see at once that the beauty of the town must depend very largely upon the opportunities which the plan of the roads will afford for the erection of buildings which will be likely to group successfully and compose into beautiful pictures.



FIG. 1.—RUE SOUFFLOT, PARIS.

The town planner should not yield to any prejudice in favour of either straight or curved streets, as they each have their own particular uses and beauty. The straight road is direct, affords good square building plots, and lends itself to the production of symmetrical street pictures. Whether short in length, leading up to some suitable building or group of buildings as a terminal feature, or of greater length affording the charm of vista and open outlook, the straight road may be of great

beauty. The curved road, on the other hand, can more readily be adapted to the contours of the site, it affords the best means for changing the direction of traffic, and lends itself to the production of constantly varying street pictures. The buildings on the concave side of such a road coming into view, one after another, are well seen; and towers, domes, and spires of larger buildings, whether immediately adjacent to the road or not, are brought well into view and often make most charming groups, rising over the shoulders of some of the smaller buildings along the street front. In Paris may be found innumerable examples of straight streets either leading up to a terminal view, opening out a distant vista, or giving the charming effect of a straight dignified avenue of trees. La Rue Soufflot leading up to the Pantheon is a sufficiently well-known example, while the High Street in Oxford may well be mentioned as showing the beauty of the less symmetrical pictures which often spring up on a curved street line (figs. 1 and 2).

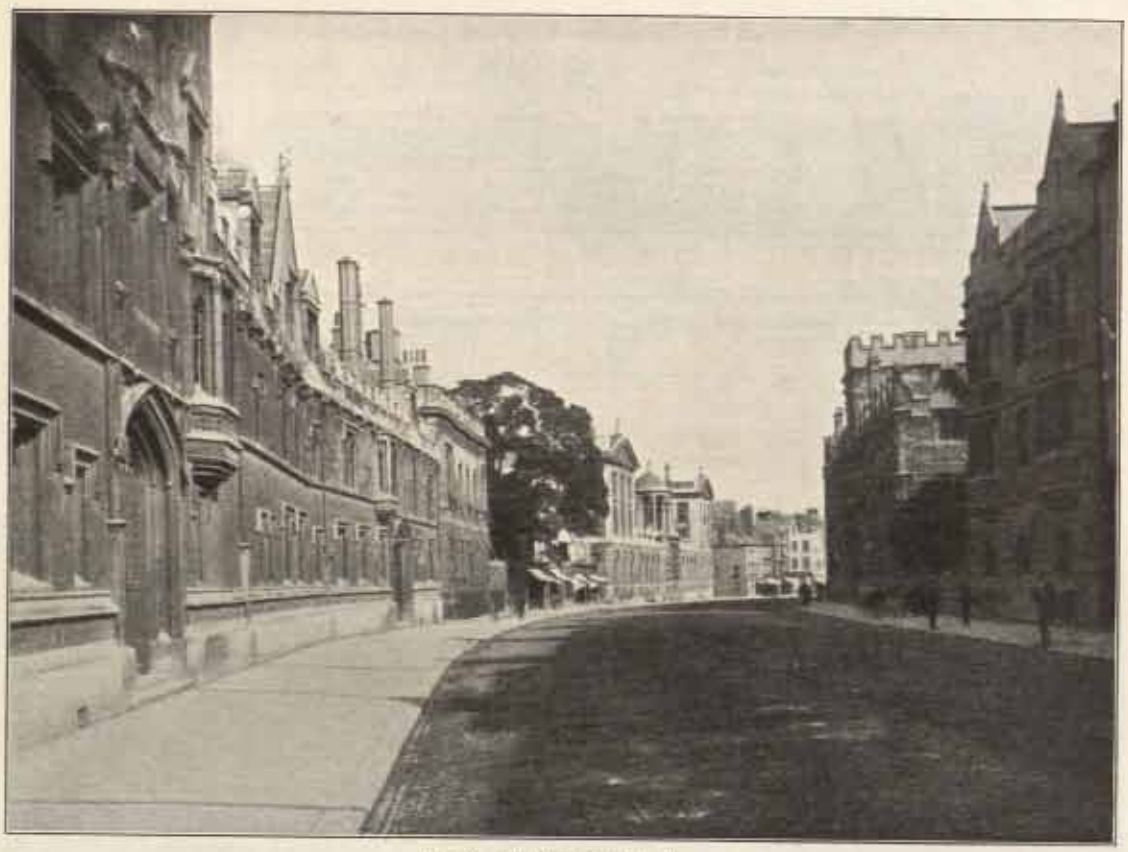
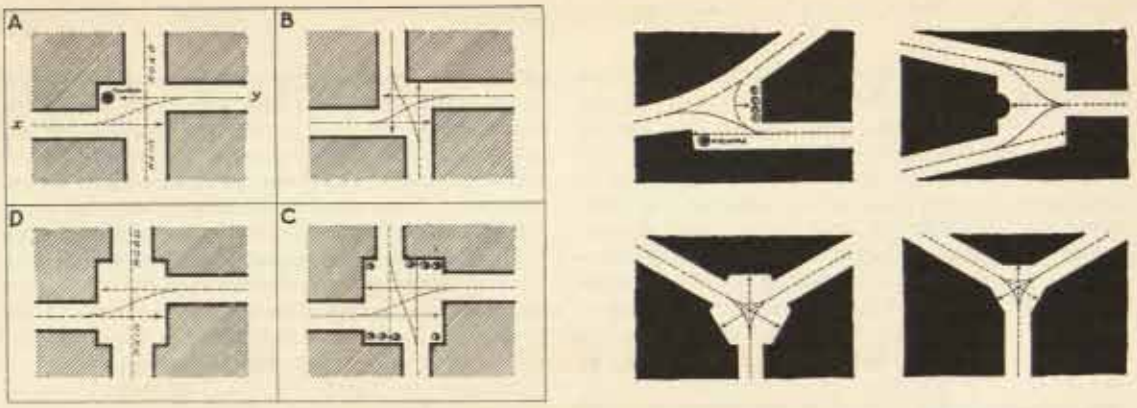


FIG. 2.—OXFORD: HIGH STREET.

The circumstances in each case must determine whether a road should be straight or curved, and whether it should be treated with a view to produce formal and symmetrical or less regular and perhaps more picturesque groupings. The study of old towns convinces us that very great beauty can be created along both lines. No doubt some will prefer the one type and some the other; but to attain success the one who prefers the more formal treatment must avoid ruthlessly driving his street lines in spite of contours or other conditions, while the one who prefers the less formal treatment must equally avoid the production of road lines meandering aimlessly, without reason in the nature of the ground, or justification in the beauty of any definite effect aimed at. Whenever on straight streets no definite reason for the long continuing vista exists it becomes important to close the ends of street views at sufficiently short distances for the terminal features to come well into the picture. This may be done either by a definite offset in the line of direction or by a change of direction or curve in the street. In the former case something in the nature of an open space or *place* must be created, in order that the lines of traffic may be sufficiently sweeping to cause no inconvenience. Generally some point of road junction will be taken advantage of for this purpose, and a little *place* may be arranged having roads entering somewhat like



FIGS. 3 AND 4.—ROAD JUNCTIONS WITH CLOSED VIEWS.

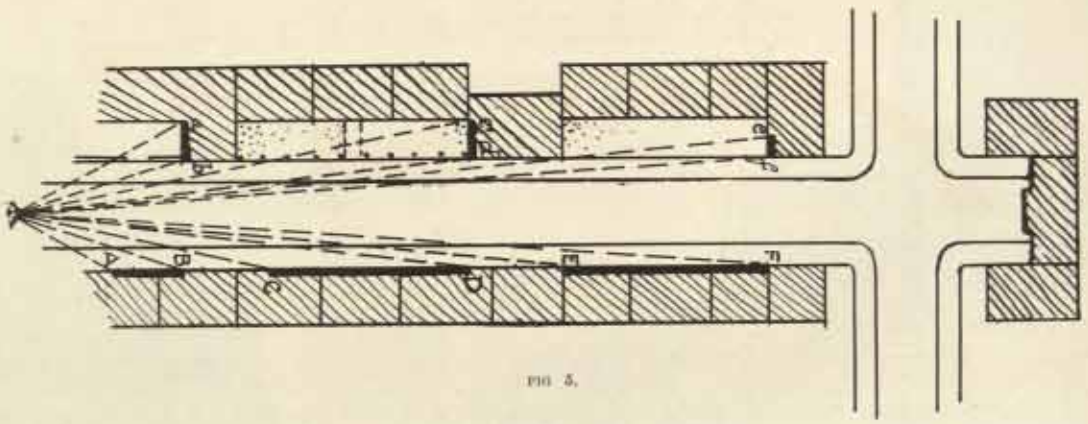


FIG 5.



FIG. 6.—VIENNA ; WERNYKEBSTRASSE ; BROKEN BUILDING LINE IN STRAIGHT STREET

the arms of a turbine in such a way that the views from all the streets are closed by the buildings opposite, while at the same time the benefit of an open outlook down each street is secured to the

The tendency for driving dust clouds to be developed on long straight streets should not be lost sight of in determining both the length and the direction of the streets in relation to prevailing winds.

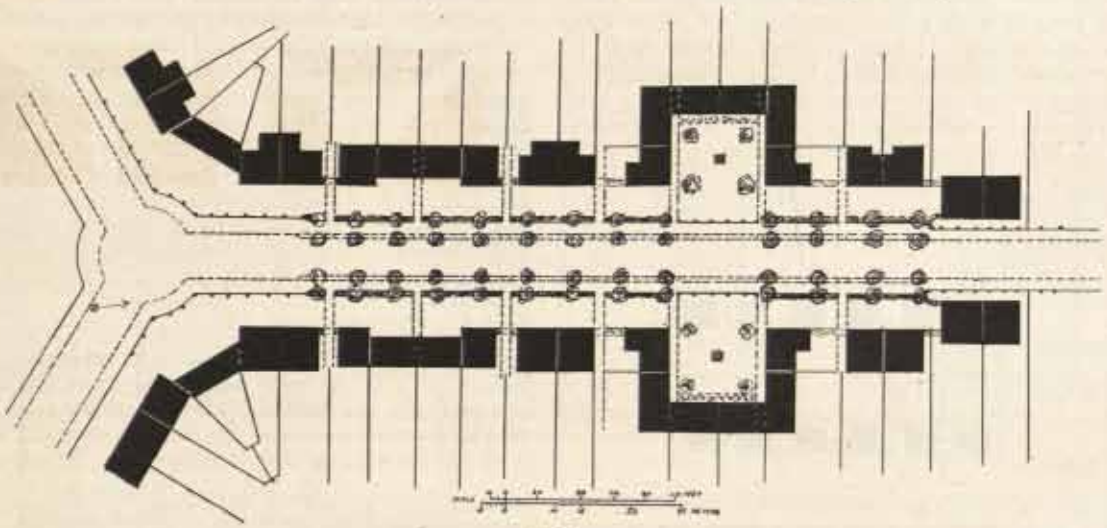


FIG. 7.

corner building. One or two diagrams will explain the way in which road junctions may be designed so that while sufficiently easy traffic lines are provided the street pictures are closed (figs. 3 and 4).

In the straight street where it continues straight for any considerable length, and particularly where there is no sufficiently important terminal view to give the necessary degree of interest, it may be an



FIG. 8.—HAMPSTEAD GARDEN SUBURB: TEMPLE FORTUNE HILL. *Photo. T. H. Hodger.*

advantage to vary the building line. If a continuous building line is maintained the whole of the picture, except the immediate foreground, is filled with a long monotonous and gradually vanishing line of buildings, the greater part of the frontage of which is seen in such acute perspective as to be quite uninteresting. If such a street picture is to be successful the long raking lines of this vanishing perspective must be broken up and something more interesting arranged to fill portions of the picture. This is done to a slight extent wherever a cross street

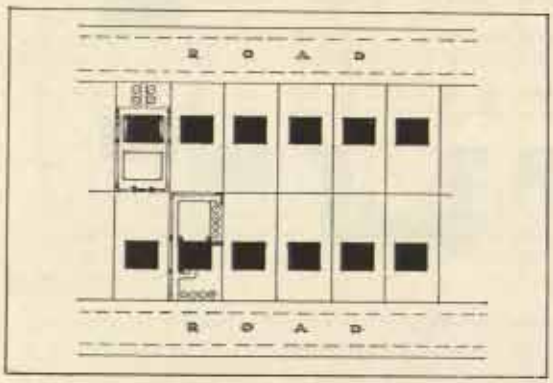


FIG. 9.

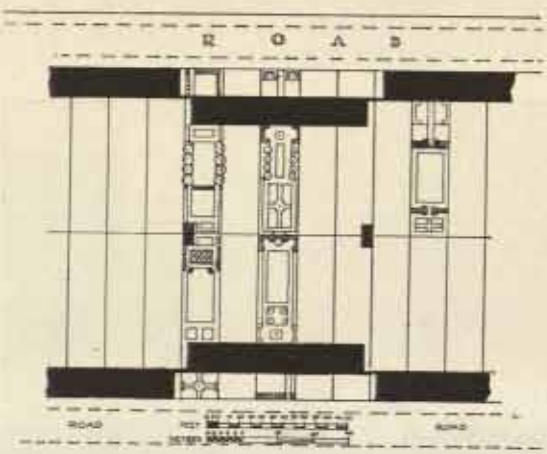


FIG. 10.

causes a break in the line of buildings (see fig. 1), but may be more effectually managed by a definite break here and there, by setting back a certain number of the buildings which will have the effect of bringing the side of those which remain forward into full view. In this way a portion of a side elevation standing nearly at right angles to the line of vision is made to replace the portion of vanishing perspective which has been removed by setting back a certain length of buildings (figs. 5 and 6). We see constantly in old Gothic towns most beautiful street pictures produced by the irregular lines of the buildings; to attempt this great irregularity under modern conditions of building may be unwise. Yet much can be attained by regular and orderly breaks in the building lines, balancing one another perhaps on each side of the street. Moreover, the consequent production of deep forecourts will enable us to introduce trees into our street picture, while existing trees standing near the edge of a new road may be retained by setting back the buildings where they occur, to a greater distance than the natural building line. Such breaks in the line must be used with restraint, otherwise the whole line of the street may go to pieces. The continued alternation of buildings and forecourts of about equal extent in the manner of the "redans" suggested by M. Eugène Hénard would reproduce monotony in another form; though his proposals contain much that is valuable and suggestive.

Where the buildings are so far apart in proportion to their height that the street picture is almost lost, as on building roads under modern conditions is apt to be the case, the effect may be greatly helped if one or two buildings on each side are at intervals brought up to or nearly up to the actual road line. Not only will such buildings, if suitably treated, help to close in the road picture but they will themselves form a frame and define the portion of road picture which is seen beyond them. Where roads are used for residential purposes breaks in the building line will often afford a greatly extended outlook for many of the houses in addition to helping the street view (figs. 7 and 8).

In circumstances where it is possible for the site planner to exercise some little influence or control on the design or materials of the buildings to be erected on any road, he can emphasise such groups of buildings as result from these breaks in building line, by maintaining particular materials or character of treatment for them; by adopting a particular style of fencing and definitely changing to another style or character at the commencement of any group which may occur at the point he wishes to emphasise. Indeed, apart from any control, when once architects begin to realise that town planning affords an opportunity for the creation of street pictures, they will, one must hope, be anxious to co-operate with the town planner and will realise that in designing the individual building they must think first of the whole street picture, and how they can best make the individual building contribute to the beauty of the whole and to the carrying out of the scheme which the town planner had in view.

One of the architect's great difficulties in garden cities and suburbs arises from the scattering of the buildings which is liable to take place owing to the Englishman's desire to have each his own detached or at least semi-detached house standing in the midst of his own garden. Along these lines very little architectural effect can be produced. It is only by grouping the buildings and combining to some extent portions of the individual plots to form greens, public gardens, or open spaces, that it is

possible to wed the town and country together without losing the charm of both. It is by no means true that the most valuable use of garden space can be made by placing each house in the centre of its own plot. In fact almost the reverse is the case. Granting good and substantial party walls which will resist the passage of ordinary sounds, granted a sufficiently long frontage so that the whole of the rooms can be properly lit and ventilated from one of the two open faces, the fact that houses overlook one another and are seen from one another less when they are actually attached than when separated by the usual gap of from 10 to 30 feet, which is all but is really more serviceable for the purposes of a garden, being divided at most into two parts, while in the detached house with the building in the centre of the plot the garden is divided by the building into four parts, some of which are generally too small to be of any real value (figs. 9 and 10). Such linking up of detached houses into groups may, by suitable design and arrangement, become the basis of a more extended grouping of these blocks into larger wholes, the unity of which may be further emphasised by the collective treatment of the fences and gardens between them and the road. Thus it is possible to introduce into streets occupied entirely

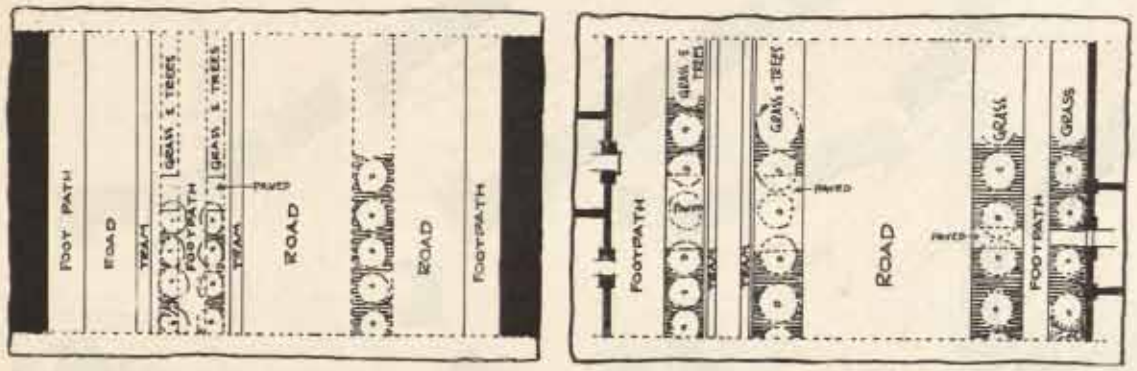


FIG. 11.

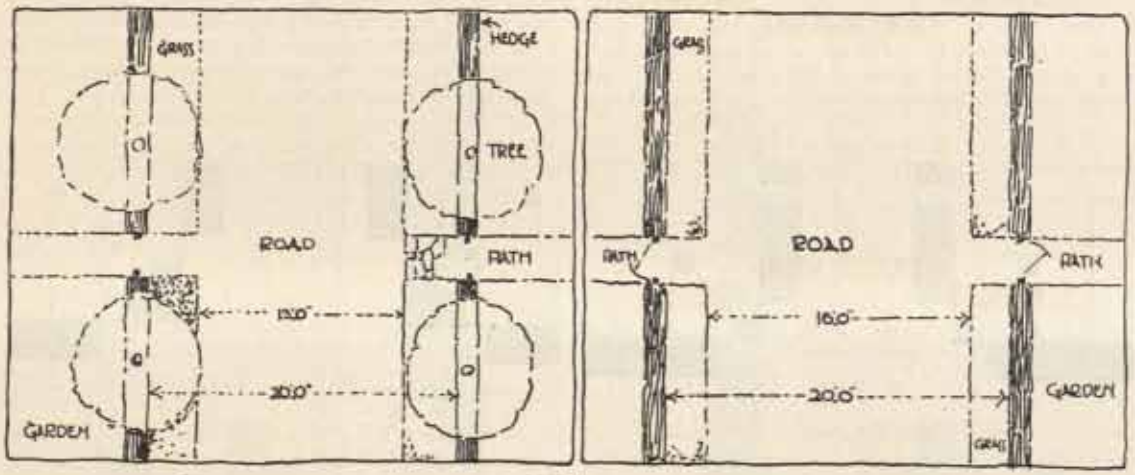


FIG. 12.

that in a suburban district can usually be arranged, should greatly help to counteract the prejudice in favour of detachment. Moreover, by building houses in groups of three, four, or more, the length of the garden and therefore the distance apart of the rows of houses is greatly increased in proportion to the area of the plot; and the garden itself not only affords a more extended outlook from the house by small or medium-sized houses units of sufficient extent to be in scale with the street, and to figure as important groups in the street picture. In this way the monotony which arises on ordinary residential streets through the constant repetition of buildings all about one size and all too small individually to fill an adequate position in the street picture can be avoided. It is a kind of monotony

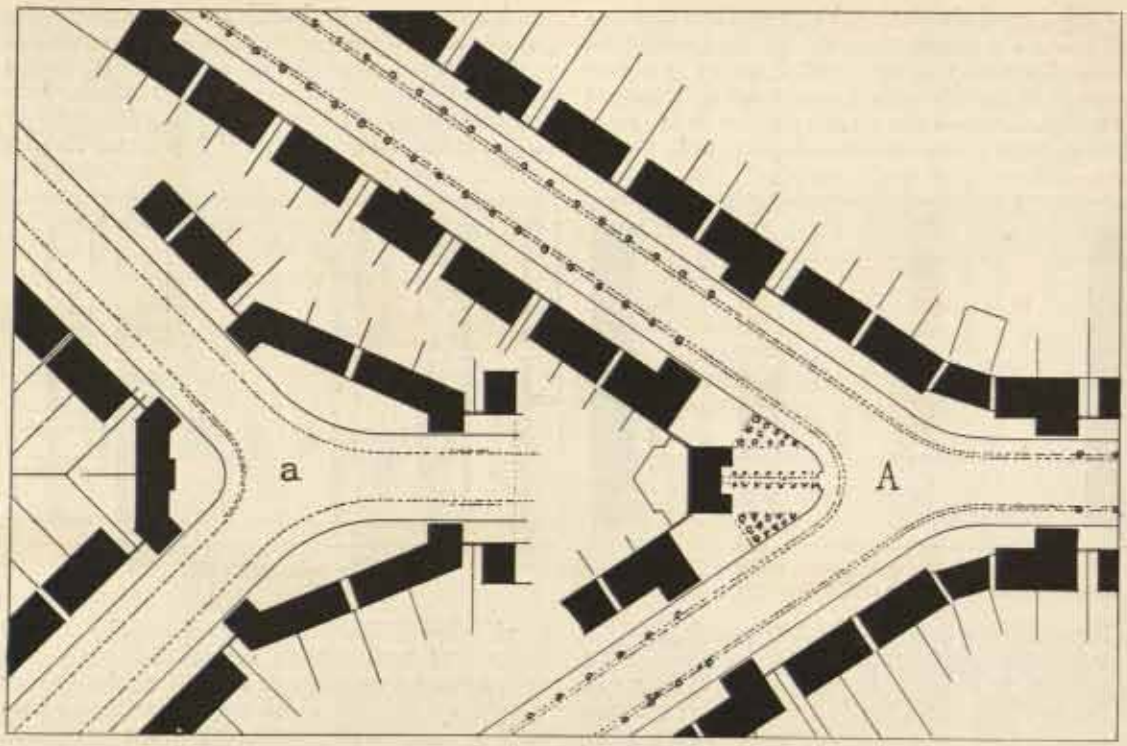


FIG. 13.—ALTERNATIVE PLANS FOR Y JUNCTION.

which is little if at all relieved by great variety in the treatment of the individual buildings, which but tends to produce, in addition to the monotony, a most unsatisfactory sense of restless disorder. In considering the beauty of towns as a whole I think we soon realise that unity of effect is vastly more important than variety; that, in fact, variety can only be properly enjoyed when it occurs within the sheltering and embracing influence of some larger harmony or unity of effect.

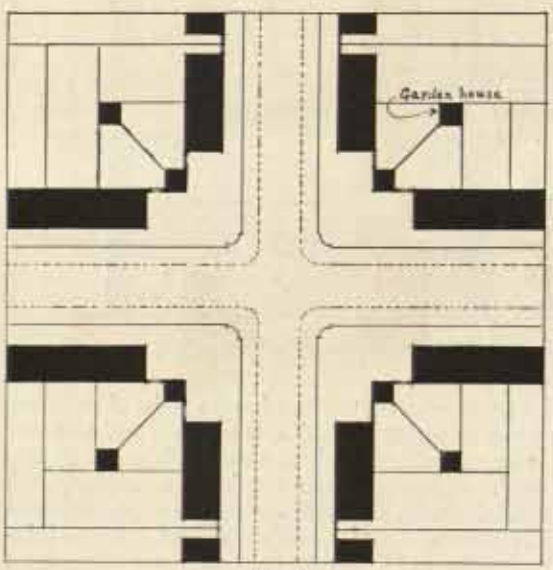


FIG. 14.

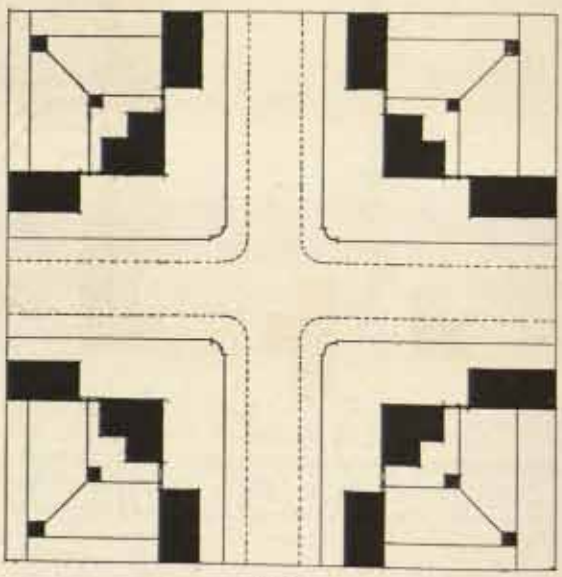


FIG. 15.

Much greater variety in the width and character of roads is desirable than is usually provided for under existing building regulations in England, where commonly a single minimum width of from 36 to 50 feet is stipulated for in all cases. For main highways in large towns, roads having multiple tracks are very desirable. They may be

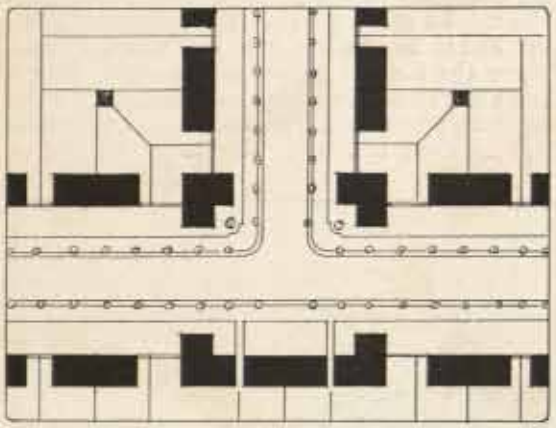


FIG. 16.

planned with a central way for through fast traffic and side tracks for slow stopping traffic, while the trams may be arranged immediately on each side of a central footway instead of being placed, as is usual in this country, in the centre of a wide roadway where the passengers must board them

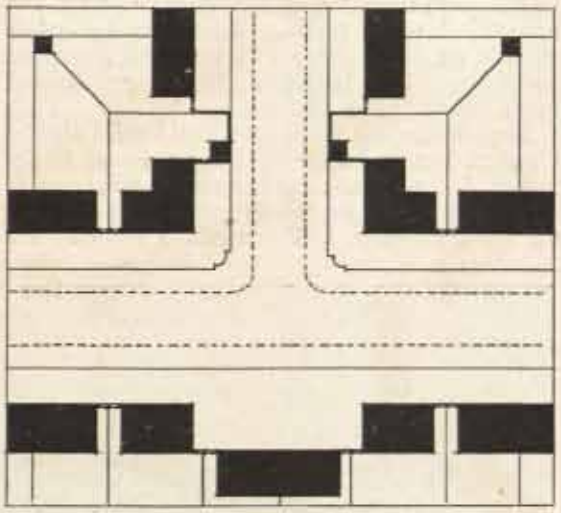


FIG. 17.

at the risk of their lives. Such wide roads, however, are expensive and will only be justifiable for the main highways in large towns (fig. 11). On the

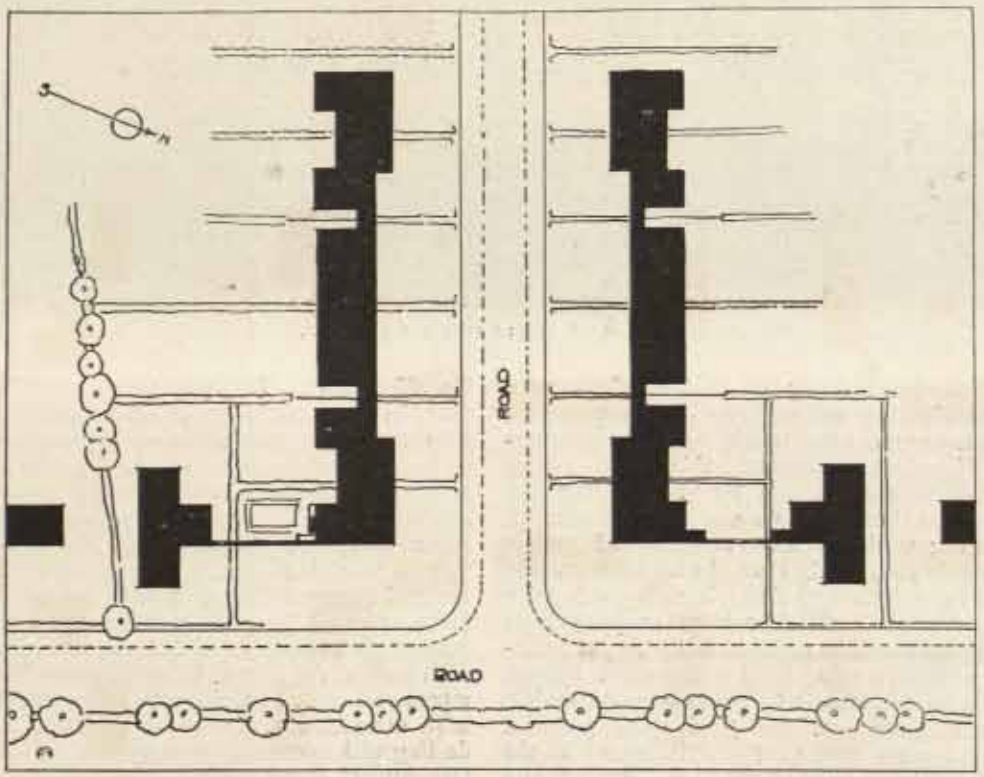


FIG. 18.

other hand, it is desirable that quite narrow carriage drives should be permitted for giving access to groups of houses standing back from the main road in squares, groves, or closes, where they will be free from the noise, dust, and smell of modern motor and other traffic. The ordinary by-law road is as unnecessary to serve such groups of dwellings as it is inadequate for the purposes of main highways (fig. 12).

In planning the roads in a residential district direction has to be considered in relation to the aspect of the houses; roads running nearly north and south are on the whole preferable, especially for smaller houses, as the windows on both the open sides will get a fair share of sunshine. On roads running east and west one of the open sides of each house must face north, which is not desirable. Where roads must take this direction extra length of frontage should be provided for the dwellings, so that all the main living rooms can face south; while on the south side of such a road the houses, if they are to be healthy, will need to be designed, as the Irishman put it, with the front behind. With cottage property it is somewhat difficult to arrange this and yet maintain a sufficiently tidy front to the street, though it can be done, particularly by the use of a certain amount of partly enclosed yard space provided under the main roof of the building or at the sides of the houses where they are detached, and very charming houses of special design, with their rooms overlooking the garden, can be worked out for such conditions. On the whole, however, for cottage building, roads having a direction approaching to north and south are likely to be better.

Much of the beauty of the roads will depend on the treatment of the junctions and corner sites. The usual form of the English open-space by-law has tended to produce very ugly street corners, where the rows of houses stop abruptly with a blank end to the side street, on which an awkward gap occurs between the back of one row of houses and the blank end which commences the row on the side street. In some towns provisions are made in the space by-law to allow for the turning of the corners, and wherever by-laws are being revised the architects in the district will be wise to demand exceptional treatment for corner sites, so that both on the external and internal angles, where groups of buildings join one another, it may be possible to fill in the angle and complete the roof line round the corner—a matter which is most essential to good architectural effect. A quadrangle composed of four detached buildings with gaps at the corners is entirely wanting in the repose and sense of unity which characterises one with completed corners. A provision for thus dealing with corners to be approved by the Local Government Board would need to provide against



FIG. 19.—KARLSRUHE: CORNER IN RONDELPLATZ.

small enclosed areas, and for an adequate amount of open space in a less restricted position, but several such forms of by-law are in use. The sketches show ways of treating road junctions; any number of others will occur to the designer, who should remember that his street pictures will depend largely for their effect on the proper placing and treatment of the buildings at these corners (figs. 13 to 19).

The spacing of the roads and the size of the parcels of building land to be enclosed by them will depend upon the class of house and the number to be allotted to the net acre of building land. For cottage property in suburban districts the desirable number will lie between ten and twenty houses to the acre. Twelve is a very satisfactory number, giving an average plot of 480 yards, which is sufficient to allow a good frontage for the house, and a garden large enough to be of some economic value, but not too large to be cultivated by the cottager without outside help. This in some places will be only a counsel of perfection to be aimed at, the change from forty or fifty houses per acre, which is not uncommon, being too great to be adopted all in a moment.

In order to avoid straggling projections at the back of cottages a frontage of from 18 to 25 feet is desirable for each house, and it will be found that plots of from 140 to 150 feet deep, giving a spacing of from 280 to 300 feet between the roads, will give a satisfactory arrangement of the buildings. The treatment of the backs of the houses and of the areas enclosed by the groups is very important, as often the rooms in which the occupants spend most of their time overlook these back spaces; and owing to the sense of enclosure arising from the fairly continuous line of buildings, it will be found that they lend themselves to the production of very pleasing architectural groupings. It does not always pay to put the maximum number of houses to the acre upon a plot of ground. Instances are not uncommon where a cross road has been made with a view to developing a small central area in some parcel of building land, which could not very profitably be developed from the surrounding roads, and where it could be shown that if to the loss of frontage on the two main roads, caused by the cross road, there is added the value of the land devoted to that road and the cost of making it, the sum expended was greater than that obtained for the central area thus developed; so that it would have been equally profitable and in every way preferable to have kept this central area for a playground or for some other such purpose. Where the gardens



FIG. 20.—HAMPSTEAD GARDEN SUBURB: HOUSES ROUND GREEN. GEOFFRY LUCAS, ARCHITECT.

attached to the house are not large enough for croquet or tennis lawns to be arranged on the individual plot, it is very desirable to provide a fair number of open spaces which may be used for such purposes, and by grouping the houses round such greens pleasing architectural effects may be obtained and features of interest introduced into the street pictures (fig. 20). In this way with a really large amount of open space it will be found possible to concentrate the buildings at certain points sufficiently for good architectural grouping to result, while the windows of the dwellings will overlook sufficient areas of open space to make them very desirable as residences. Along these lines, to some extent at any rate, it is possible to combine the advantages of town and country without producing the unsatisfactory and spotty effect which results from the spreading of small detached houses in large numbers over a wide area of ground.

The importance in planning both towns and suburbs, and even smaller sites, of having some centre point to the design, has already been mentioned. The nature of this must depend very much on the size and character of the area to be dealt with. For an industrial village, a large open green, such as adorns many an old English village, may form a fitting central feature, with the few small public buildings—such as church, institute, chapel, village stores, and post office—gathered about it. For small estates a suggestion may be taken from the wide village streets which have sprung up along old highways, and a short length of good wide road, with avenues of trees and space for a promenade, may afford a centre for the local life of the area where may be gathered the few public buildings and shops required. In larger suburbs a central square, *place*, or group of *places*, may be a more fitting arrangement. In any case, it is important to group together, as far as possible, the few available public buildings, so that some total effect may be produced by their arrangement and considerable emphasis may be given to the centre. To be seen to the best advantage buildings need some frame and background, and should not usually be placed in isolated positions in the centre of large sites. Where something in the way of a square or *place* can be arranged, it is important to secure a sense of enclosure in it. The frame of the buildings should not be broken by many wide roads leading out of the *place*, and such roads as are required should be so planned that from within the *place* long open vistas down these roads should not distract the attention of the spectator when viewing the groups of buildings; while, as far as possible, the views into the *place* from these roads should be closed, the roads not being placed exactly opposite one another.

Where roads must necessarily pass out of the *place* on the same side as the main groups of the buildings they should either take a direction at right angles to the line of vision, or if they must start along this line their direction should be quickly changed so that the view down the road may be closed and the background and frame be completed. Where it is desirable to obtain good views of some building on several of the sides, instead of placing it in the centre of a large open space it is better to form a group of *places* on the different sides of the building so that a due frame and setting is provided for each view. It is also desirable that the chief public buildings should be so placed that they form terminal views to some of the main streets, and may afford notes of interest in as many of the street pictures as possible.

Note.—The illustrations figs. 1, 3, 6, 7, and 19 are taken from the author's recently published book *Town Planning in Practice*, and the Institute is indebted to the publisher, Mr. T. Fisher Unwin, for permission to reproduce them.—Ed.



REVIEWS.

ANCIENT EGYPTIAN ART.

The Arts and Crafts of Ancient Egypt. By Prof. W. M. Flinders Petrie, D.C.L., F.R.S. 8o. 1909. Price 5s. net. [T. N. Foulis: Edinburgh and London.]

In some of the numerous text-books on the arts and crafts their earliest developments in Egypt are occasionally referred to as a part only of their history, but Professor Petrie has confined himself to Egypt alone, and the perusal of the book recently published shows that his limitation was amply justified, and that compared with the work of the present day that of Egypt in many cases can hold its own. It is certainly most remarkable that in prehistoric times (8000–5500 B.C.) according to the Professor, the hardest materials, such as granite, porphyry, and diorite, were wrought as freely as limestone and alabaster, perfectly regular forms of vases being cut entirely by hand without any lathe. In the historic periods it has often been noted that the further one goes back the more perfect is the sculpture, and this is summed up by Professor Petrie who says "that the whole level of art of the XVIIIth dynasty is as much below that of the XIIth as the style of the XIIth is below that of the IVth dynasty." It is to this latter period we owe the statue in diorite of King Khafra, which is certainly a most remarkable work both in modelling and carving. Fine illustrations are given of this and numerous other figures and bas-reliefs, so that the developments at the various periods can be easily followed. The chapter on architecture is unfortunately the shortest, only seven pages and two illustrations being given to it, whereas the whole volume might have been devoted to the subject by the Professor, who certainly knows more of the subject than anyone else. He commences by pointing out that Egyptian architecture has never been systematically studied; in other words, so far, no discovery has ever been made of the papyrus of some Egyptian Vitruvius who might do for Egyptian architecture that which has been done for Greek. In the few pages given the origin of the principal features is suggested, that of the cavetto cornice being the most plausible of those put forward, though Viollet-le-Duc and other architects have attempted it. Of the other chapters, that on jewellery is the most interesting as it shows that many of the processes employed in the present day were well known to the Egyptians, and the minuteness and elaboration of the spiral forms and of granulated work similar to that known as Etruscan reaches a remarkably high level. Metal work and glass came at a later period, but even in the XVIIIth dynasty the inlaying of threads of glass in elaborate pattern preceded those of the Ptolemaic and Roman age when minute mosaics were produced. The employment of plaster and stucco, of the former in the fourth century in the Pyramids and of the latter in bas-reliefs well modelled and full of minute detail, shows how wide a field the arts and crafts covered in the ancient civilisation of Egypt. The 140 illustrations of the work are of great value in explanation of Professor Petrie's descriptions, to which seven pages of index enable the student to refer at once.

R. Phené Spiers, F.S.A. [*F.*].

OLD MIDDLESEX.

Memorials of Old Middlesex. Edited by J. Tavenor Perry. (Memorials of the Counties of England.) 8o. Lond. 1909. Price 15s. net. [Bemrose & Sons, Ltd., 4 Snow Hill, E.C.]

Middlesex as a county is one which we hardly know as having an individuality of its own, although it is in fact the county in which the greater part of the Metropolis stands. The history of Middlesex for so many centuries has been so intimately bound up with that of London that one can well imagine the task of the authors in tracing its special history and memorials has not been an easy one, and that they have achieved so satisfactory a result speaks well for the able work which has been put into it by Mr. Tavenor Perry.

The book contains thirteen articles dealing with various aspects of the life of the county by such writers as the Earl of Ilchester, Rev. W. Done Bushell, F.S.A., Rev. J. Charles Cox, LL.D., Warwick Draper, S. W. Kershaw, M.A., R. Phené Spiers, F.S.A., Aymer Vallance, J. Charles Wall, and the Editor himself. The style throughout is pleasant, and the book is one which will be of interest both to the general reader and to the antiquary. The photographs and other illustrations with which the work is well provided will also be of great value for reference purposes to all interested, now or in the future, in the ancient memorials of Middlesex.

Among the illustrations are reproductions of some fifty admirable drawings, for the most part the work of Mr. Tavenor Perry, whose well-known talent as a pen-and-ink draughtsman was established as long ago as the 'sixties, when he was awarded the Institute Silver Medal and the Pugin Studentship, and has been often attested since in the Institute Transactions and Journal and in the *A.A. Sketch-book*.

The opening chapter by the Editor traces the history of the county from the earliest times, when it scarcely had an identity of its own, its sheriffs being sheriffs of both London and Middlesex even up to the Local Government Act of 1888, when, after the cities of London and Westminster and the modern County of London were withdrawn, the remainder was for administrative purposes denominated Middlesex. For the purposes of the book, however, Middlesex is taken as including all but the two ancient cities. We see its physical features, its shape and natural boundaries, its plain

sloping gently to the river Thames, with occasional gravelly heaps amongst the marshes of the water-side, forests on the north and east, with tracts of marsh and open heath, only a few eminences raising their heads above the plain, but with plenty of streams with which to water the broad expanse of land. We are told how the Romans made the wild places fruitful and the wild tribes civilised; how during the Saxon period the country largely lost its cultivated aspect and, except in the vicinity of London, lapsed back to its primitive state. An interesting account is given of the waterways and the artificial conduits constructed in the following centuries.

The Ancient Churches of Middlesex, by Rev. Charles Cox, LL.D., F.S.A., is a long and fascinating chapter, brimful of information and interest. The churches of Middlesex are not generally considered especially noteworthy from an architectural point of view, but Mr. Cox has treated the subject in a way which brings out all their best points. The absence of building stone in the county and the task of transport caused the fabric of by far the greater part of the old Middlesex churches to be chiefly composed either of small rubble or rough flints, the use of cut stone being limited by the difficulties of carriage to the neighbourhood of the river. Middlesex cannot boast of many special architectural features as peculiarly her own, the western square towers found in many other English counties being the predominating feature of the churches. An alphabetical list of ancient churches is given, with their history, their growth and their treasures, with dates of alteration and names of architects when known. The renovations and restorations are often a peculiar pain to the writer. He describes them as drastic and fiercely destructive—usually done from a good motive, though in one instance two churchwardens, a carpenter and a bricklayer, are quoted as doing each other a good turn and the church a bad one by substituting wooden mullions for the stone tracery of the nave windows and beginning to enclose the old stone tower with brick.

The article by Aymer Vallance, F.S.A., on "Roods, Screens, and Lofts," is necessarily a short one. It contains an alphabetical list of churches, with descriptions of the remains of screen-work still existing, from which an idea may be obtained as to the original appearance of the screens. To the archæologist it is a matter for regret that Middlesex is not rich in them, but the iconoclasts have been busy here, as elsewhere, and the remains of such screens are few.

The chapter by J. Charles Wall on "The Battlefields of Middlesex" is a breezy contribution, which sheds much light on the history of the struggles for the possession of the Metropolis. It is tempting to give an epitome of this chapter, but to do so would be hardly fair. We are so happy and commonplace nowadays that we do not think much of the happenings of long ago, when the ground which we tread upon was the scene of conflict between native and invader, or of un-civil warfare between brethren. "Grimes Dyke," in the north-west of the county, a little known but massive earthwork of vallum and fosse, was manned in ancient days to repel hostile tribes from the south-east. "Brentford" is satisfactorily proved to be the place where Cæsar crossed the Thames, the remains of stakes planted in the river at that point by British hands, and apparently answering to Cæsar's description, having been found there a few years ago. Another earthwork at Harmondsworth, 380 feet square, is also ascribed to Cæsar by local gossip. In Cromwell's time, Brentford again became the scene of conflict between the opposing forces of King and Parliament.

The name "Battle Bridge," not far from King's Cross, survives as commemorating the battle in which Boadicea was finally defeated by Suetonius and his Roman legions in A.D. 61. The greatest struggle though, perhaps, was that which took place at Barnet on Easter Day, 1471, in which Warwick, the King-maker, met his end. The Lancastrians, under the Earl of Oxford, pursuing Hastings through the streets of Barnet were in the fog again attacked by their own comrades, who were unaware of their success. Warwick and Somerset in the mist mistook Oxford's "star radiant" for Edward's "sun in splendour." Cries of "treason! treason!" arose on all sides. The great Warwick is reported to have died with his back against a tree which still remains as a finger-post of history. An obelisk to "the Last of the Barons" has been erected not far from the spot.

A chapter by the Earl of Ilchester deals with "Holland House." Its erection and perfection by John Thorpe in 1610, with its lavish embellishments, is described in well-chosen words. The many interesting plans and pictures of this old mansion will be perused with pleasure by all taking up the book. To students of history and biography the account of the former inmates of Holland House and the way in which it became during the eighteenth century a gathering place for diplomats and scientists, wits and statesmen, will be equally agreeable.

Mr. S. W. Kershaw, M.A., F.S.A., gives the history of Fulham Palace and the Bishops of London from the time the manor was granted to the Saxon bishop in 691. In 879 the Danes made an excursion up the river as far as Fulham and appear to have wintered on the site of the palace, the digging of the moat enclosing 28 acres being by some authorities ascribed to them.

Fulham Palace itself was built in the time of Henry VIII. Successive bishops have left their mark on walls, windows, and additions. The history of many is given—good and great men in their time. Four successive Bishops of London became Primates—Abbot, Laud, Juxon, and Shel-

don. Particulars are given of the old privileges possessed by the bishops, and how in modern times they had to be compensated.

In a chapter by Rev. J. Charles Cox "The Monastery House of Syon" is affectionately and enthusiastically treated from the date of its foundation by Henry V. in 1414. A most interesting description is given of the Order and their strict rules of self-denial and silence. Henry VIII.'s vengeance because they would not forward his divorce from Katharine of Aragon brought about the ruin of the convent, the execution of its confessor, and the dispersion of the nuns. The unhappy queen, Katharine Howard, was imprisoned here until her execution. Henry VIII. himself lay here dead, his body resting at Syon for the night on the way from Westminster to Windsor, and Mass was celebrated for the repose of his soul. The present mansion, founded by Protector Somerset, was built from the ruins of the monastery. It was from here that Lady Jane Grey set out to claim her brief queenship, and with various vicissitudes the old mansion has since remained a palace for the House of Northumberland.



HOLLAND HOUSE: WEST FRONT.

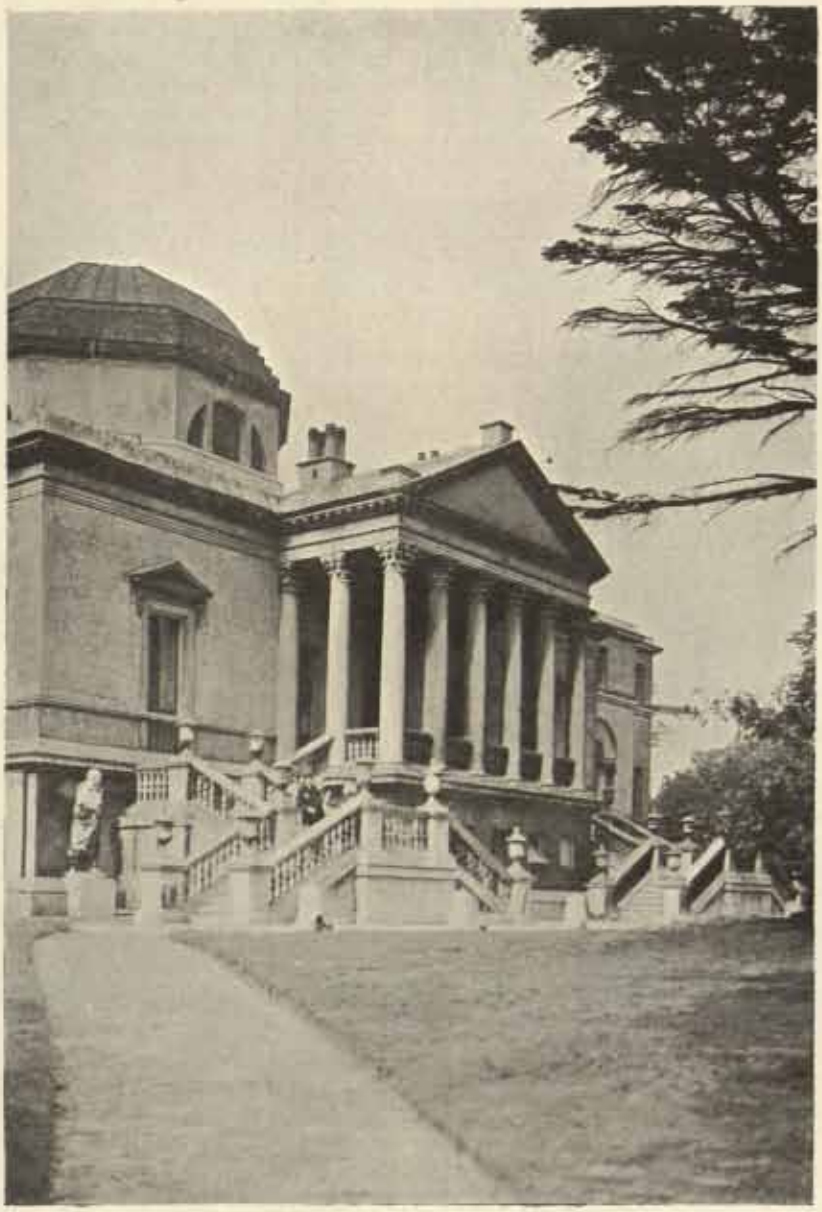
Chapter VIII., by R. Phené Spiers, F.R.I.B.A., F.S.A., gives an excellent account of the gradual growth of "Chiswick House" from the original villa built by William Kent for the Earl of Burlington about 1729. Past and present plans are given of the old building and an account of its architects and history. The views given of both house and pleasure-grounds are extremely good; Kent, the architect, is said to have been the first to introduce into England the combination of the Italian and the English garden, and thus led the way to modern landscape gardening. The pleasure-grounds were lavishly ornamented with temples and sculpture. The illustrations give an idea of the beauty and wealth of ornament, both within and without the building—not large but luxuriant, filled with gems of art, antique statues, and valuable paintings, which were visited by royalties, statesmen, students, and connoisseurs. Charles James Fox and George Canning both breathed their last in Chiswick House.

A contribution by Rev. J. Charles Cox on "The Parks and Historic Houses" gives an alphabetical list of parks and houses which will be very useful for reference in years to come. It appears from the Domesday Survey that the Crown lands in the

county were very small, but numerous parks and domains have been formed in the course of centuries out of the original heath or forest, and the history of each is successively traced.

The story of Chelsea is given by Mr. J. Tavenor Perry from the time when it was but a gravelly mound by the side of the River Thames, its growing importance so that Witenagemot and Synods were held there in Saxon times, its more recent history, its parish church, unique in having with its treasures largely escaped the wholesale restorations to which most old London churches have been sacrificed, also various interesting views and references to houses and buildings which adorned its riverside in the eighteenth century.

Harrow-on-the-Hill is dealt with by Rev. W. Done Bushell, F.S.A. The history of Harrow is written in its church which has undergone so many changes during the passing of the centuries. In the building itself it would seem that Roman bricks are to be found, and of the place itself the records go back well into Saxon times—the archbishops of



CHISWICK VILLA: SOUTH FRONT.

Canterbury having held lands at Harrow since the ninth century, and being lords of the manor of Harrow until the reign of Henry VIII. The church was commenced by Lanfranc and consecrated by Anselm in 1094. The Norman church has been much altered, but portions of Norman work still exist in the lower part of the tower and buttresses. The original Norman church was succeeded by an Early English church, and this again was successively altered and amended at various times, the spire being added in the fifteenth century and the church finally restored by Sir Gilbert Scott in 1849. The account given of the Old School and its more modern buildings is also good.

Chapter XII., by Warwick Draper, deals with the "Riverside Haunts of Poets and Painters." One would naturally expect this title to cover the whole length of the riverside, and it is rather a surprise to find that the writer limits himself to the space between Kew and Hammersmith Bridges. The hospitality of Chiswick House during the eighteenth and nineteenth centuries is no doubt responsible



GATEWAY DESIGNED BY INIGO JONES FOR CRANFIELD, EARL OF MIDDLESEX, NOW AT CHISWICK.

for the way in which so many painters and poets made this portion of the river one of their most favourite haunts. One almost wonders what kind of *haunting* it is the author refers to when he says the poet Thomson, "who died in 1748 from the indirect results of an imprudent boat journey from Hammersmith to Kew, is thought to have haunted this riverside."

In the concluding chapter Mr. J. Tavenor Perry describes "The Twelve Miles Pilgrimage of the Brent," the little river which runs across the county from where the Dollis Brook and Silk Stream meet to where it arrives at the one time county town of Brentford, to which it gives its name. Not many mighty, not many noble adventures has it, but still it has a history; first robbed and then repaid by the neighbouring canal, past British foot-track and Roman camp with many twists and turns on to where Cæsar crossed into Middlesex, just at its junction with the Thames at Brentford.

With the pilgrimage of the Brent the story of Old Middlesex is concluded. As the author well says, although no abbey or castle remains to tempt the pencil of the artist, yet in many a little-known village church there is much to be appreciated by the architect and the ecclesiologist, and, small though it is, Middlesex, within which stands the capital city of the empire, has played by no means an insignificant part in the history of our country.

W. R. Davidge [*A.*].

THE MODERN HOUSE.

The Principles and Practice of Modern House Construction, including Plan and Design. Construction; Water Supply and Fittings: Sanitary Fittings and Plumbing: Drainage and Sewage Disposal: Warming: Ventilation: Lighting: Stables and Cowhouses: Sanitary Law, &c. By many leading Specialists under the Editorship of G. Lister Sutcliffe, A.R.I.B.A. New Edition, thoroughly revised and considerably extended. In 6 divisional volumes, 8s. net per vol. Also in 2 vols. 50s. net, complete. [The Gresham Publishing Company, 34 and 35 Southampton Street, Strand. 1909.]

"Buildings are erected principally as a protection from the ever-varying conditions of the atmosphere." We quote this text from Section XI. of the book under review, and perhaps we may be allowed to compliment Mr. William Henman upon the delightful manner in which he has dealt with the subject of ventilation in that Section. His remark is so very true that it may be forgotten even in an architect's office; but, if it be kept in view, it will help the formation of a proper frame of mind in which to approach every phase of building construction.

We all have some idea of the wide range between the extremes to which our fickle weather of England will go, but luckily there is a vast fund of experience behind us of various methods which have been found to meet those extremes with more or less success. The design and erection of a house is no new undertaking, but it has developed into a problem of intense complexity, and, somehow, an architect is generally expected to know all about it in all its bearings. In fact, so wide a field of study in practical matters opens up before the beginner that he might well despair of becoming its master, to say nothing of his becoming a master of design, were it not for the help he may gain from men who are experts in the various specialities.

In these volumes Mr. G. Lister Sutcliffe has presented a number of contributions by specialists in the various branches of house construction that are enumerated in the title, and in organising and joining this collaboration he has collected much of the common experience that is, or should be, the basis of present practice and the starting-point from which to seek further developments. We are pleased to see that the book has met with such success as to warrant the issue of a new edition.

The work extends from the digging of foundations to the dusting of furniture; it discusses geological strata and domestic filters; it touches upon legal decisions as to when a drain is not a drain. We may venture a criticism as to its scope, for we find that in some sections we are taken rather far afield for a book which purports to confine its attention to the making of homes. For example, we learn from the records of the monthly rainfall at Greenwich during the years 1896–1905 that the driest month was April, renowned for showers, while the wettest month was flaming June. On the other hand, the bells of our house having given some trouble lately, we look in vain for a hint on that subject, for it is not included.

Again, there is perhaps something too much of patent traps and of the jointing of pipes of all kinds. They are very important matters, but in our view a book should make its subject appear to be as easy as possible, and in this case a simple outline would have been better, especially as it is intended for the perusal of architects. They need not know as much about the mystery of plumbing as a registered plumber. In these days of supersanitation there is a tendency to overdo science at the expense of art, which tendency the preponderance of hygiene in these volumes may foster.

We notice that much information is repeated in various chapters of the book, and also that there are several apparent contradictions. In one place the advantages of large windows are shown, and in another their disadvantages. Here the snug effect of a low building is pointed out, while there the benefit of a high ceiling is advocated. In two places we are advised to build our chimneys on internal walls by way of avoiding down-draughts, and in two other places we are advised to place our ventilating inlet on the same wall of a room as our fireplace. In this way the book brings out unconsciously the all-important fact that a house

is at the best a compromise between conflicting considerations. Further, in other ways it seems to suggest the fact that many of the problems with which a builder has to deal find their solution simultaneously in a good architectural plan.

A few minor points in the book come to mind. Double-glazed windows are recommended for warmth. If they are used, dust will surely find its way into the air space between the two sheets of glass, and they can never be cleaned unless the beading of the inner sheet is "screwed to remove." The risers of staircases are given at anything from 5 inches to 9 inches, which strike us as truly "outside sizes." Plate I D is referred to on page i, 44, as Plate I F; and on page i, 55, "No. 4 Plate I D," seems to refer to No. 2 Plate I E. We should like to have seen the present magnetic north on the aspect compass, and to have read a chapter or two treating of gardens.

It will be seen that we offer no very severe observations against the work, while on the contrary we note with pleasure that it records many little items of importance which we have picked up here and there, but do not remember having seen in print before. A student who buys this work will find it to contain the substance of many special publications all well arranged under one index. It is clearly printed in large type, and although it is arranged as two volumes, it has been bound up into six divisions which have the merit of being light and handy.

There are many helpful illustrations, and they are conveniently placed, but in a few cases the colouring is deplorable. It is a pleasant contrast to turn to the photographs of some of Mr. Sutcliffe's buildings.

A further illustration is issued with the book in an envelope. It takes the form of a coloured set of plans, elevations, and sections for a house, together with a specification. The plans are printed on separate sheets of paper, cut to the outline of the building, and attached in such a way that they cover each other in the proper order. Thus the roof plan may be turned back to reveal a plan of the roof timbers. This may be folded back to show the chamber floor, under which in turn are the ground-floor and foundation plans. Similarly the sections are covered by the elevations. This rather novel system of presentation might be adopted for the edification of lady clients.

J. NIXON HORSFIELD [*A.*].

STRUCTURAL DETAILS.

Structural Details, or Elements of Design in Heavy Framing. By Henry S. Jacoby, Professor of Bridge Engineering in Cornell University. 8*o. Price* 9*s.* 6*d. net. [New York: John Wiley & Sons. London: Chapman & Hall, Limited.* 1909.]

This work, as we may understand from the Preface, embodies the course of instruction which its author has been conducting in the College of Civil Engineering in Cornell University during the past nineteen years. The framings which form the subject of the course are all of timber, comprising centerings, roof trusses, bridges, &c. According to Professor Jacoby, experience shows that in many respects problems involving timber construction are better adapted for the purpose of instruction in the application of mechanical principles than if confined to structural steel. Steel accordingly plays a subordinate part in the examples before us, except where steel suspension rods supersede the king and queen posts of old-fashioned systems.

"It may appear at first sight," writes the author, "as if too much attention to details is given in the examples on the design of joints, beams, and trusses." Certainly much space is devoted to details which, it is safe to say, do not meet with much attention from English students. We have, for example, nearly nine pages occupied in a discussion on the holding power of different forms of nails in various kinds of wood, illustrated with the results of careful experiments on the resistance of nails to withdrawal. Some readers might possibly be disposed to ask *Cui bono?* A joint which depended for its strength upon the resistance of nails to withdrawal would be a very bad piece of carpentry. The lateral resistance to shearing is, of course, important; and this is fully treated by the author.

The subject of centering is treated at some length with numerous illustrations of details. A whole chapter is devoted to joints used in framing, and this is followed by examples in the design of wooden beams and columns, after which the author deals with various kinds of framed structures. There is much that is valuable, but it is evidently most so in localities where timber is plentiful and rolled steel not readily obtained. The book abounds with references to various engineering journals from which a diligent student may glean further information.

GEORGE H. BLAGROVE.

SPONS' PRICE-BOOK.

Spons' Architects' and Builders' Pocket Price-Book: Memoranda, Tables, and Prices. 37*th edition. Edited by Clyde Young, A.R.I.B.A.; revised by Stanford M. Brooks, architect.* 1910. *Price* 2*s.* 6*d. [E. & F. N. Spon, 57 Haymarket.]*

The latest edition of this handy little book runs into 628 pages, but thanks to the thinness of the paper it is not inconveniently bulky for its purpose as a pocket-book. Further new matter has been added to the Memorandum Section, and the Price-Book Section has also been amplified. A new and valuable feature of this edition is the Tables of Constants of Labour and Materials for all trades. Note should be made for the next edition of the change recently made in Clause 30 of the R.I.B.A. Form of Building Contract.

THE *HAUTES ÉTUDES* OF ARCHITECTURE.

By R. M. Hamilton [*A.*], Perth, West Australia.

Some years ago, the late César Daly, on the occasion, if I remember rightly, of his receiving the Royal Gold Medal at the Institute, advocated what he termed the "Hautes Études" of architecture. The expression carries with it a well-understood meaning in French, but is rather difficult to crystallise into an English equivalent. One can see, however, what the expression conveys without actually translating it. The distinguished attainments of César Daly entitled him to speak for such "Hautes Études" with authority, though at that time they were little pursued in France, and not at all in any official way in the United Kingdom. It was about this time that the active brain of the late Arthur Cates was evolving his organised scheme of examination and education.

The French have always had the advantage of organised education at the Ecole des Beaux-Arts, with official recognition, and a long tradition in the classical styles. This advantage has had to be created in England. Before the time could be ripe for approaching the "Hautes Études," the groundwork has had to be thoroughly established. The moment seems now at hand, however, when by the force of circumstances the higher investigations are to be more widely and generally taken up. Looking back to the time I refer to, even César Daly himself would be satisfied with the progress made towards the consummation in the "Higher Studies" he so earnestly advocated. At that time the architectural student in London had only the lectures at University College and King's College, the Architectural Association voluntary classes, and the Architectural Museum for practical work. The Royal Academy School of Design was the only place that could colourably be said to come within the scope of the "Hautes Études." A long step has been taken since that time, which might comparatively speaking be called the Dark Ages, though there was no lack of enthusiasm and earnest study so far as the existing means allowed. Now each year sees university courses established with professors and staffs of instructors, to culminate in a co-ordinated system for the whole of the kingdom. This condition of things must lead to a consideration of all the higher phases and aspects of architecture, both on the constructive side and the artistic. Reinforced concrete will compel attention to mathematical problems, while the artistic side will lead afresh to the study of first principles. This may already be said to have begun unconsciously, if we may judge by the subject-matter of the Papers read at the Institute during the last two or three sessions. Some recently published books—Professor Blomfield's *Mistress Art* and Mr. Belcher's *Essentials in Architecture* for instance—also show the tendency and trend of thought. They are formulating abstract ideas, seeking to disclose again the first principles underlying the unconscious practice.

Architecture elevated to the status of a university subject, to be taken in a course of liberal and general culture, will occupy a higher place in the public estimation, and will consequently lead the best classes of the country to take a keener and more intelligent interest in fine building. A genuine power of criticism will develop again amongst that class which a century ago prided itself on its love for architecture and its knowledge of the art. Such a desirable condition of things will react as a stimulus upon architects themselves. There will be a fairer prospect of the "Mistress Art" being lifted up into a higher plane and of influencing civic life and thought more immediately and powerfully. The revival of the old spirit of artistic dilettantism would not be unwelcome, and would perhaps lead to an increase in the Hon. Membership of the Institute.

With this new departure the classical spirit will probably more strongly prevail again as being more systematic and ordered. It may even perhaps induce another Greek wave, to culminate afresh in such a phase as prevailed in Scotland in the designs of "Greek" Thomson. Will it be possible, indeed, to avoid this when abstract principles and propositions, such as design, style, and proportion, attract attention and come to be lectured upon? Will the extended use of reinforced concrete lead to the evolution of a neo-trabeated style of a light slimness and elegance unknown to the old masters and partaking of a Pompeiian decorative expression? There is only the choice between the arcuated and the trabeated systems. The "Mistress Art" may coquet with one or other for a time, or perhaps decide to use one system for the more monumental and decorative purposes, and the other for the more prosaic and utilitarian. Can the gaunt skeleton frame of reinforced material be developed into a severely restrained but appropriately treated system of beam and pier? There is always the possibility in these rapidly moving days that some new idea will emerge before any adequate treatment can crystallise out and sidetrack the development. How many lovers of our art have hoped for the development of a new style, yet the longing seems as far as ever from realisation. Here is something for the newly gowned professors to concentrate their abstract meditations upon. As a university subject architecture must be more fully and broadly treated and analysed; it must be lifted up to the rank and dignity of the "Hautes Études." Can construction be so treated also? On one point at any rate there can be no doubt, that we of the present day may regard with envy the opportunities and advantages now offering to architectural students, and hope that they will justify the provision made for them.

9 CONDUIT STREET, LONDON, W., *5th March* 1910.

CHRONICLE.

Revised Regulations for Architectural Competitions.

The discussion on the Revised Regulations for Architectural Competitions, adjourned from the Business Meeting of the 3rd January, was resumed at the Special General Meeting of the 7th February, Mr. James S. Gibson, *Vice-President*, in the Chair.

The revised document was in the following form :—

REGULATIONS
APPROVED BY THE ROYAL INSTITUTE OF BRITISH ARCHITECTS
FOR
ARCHITECTURAL COMPETITIONS.

Matter proposed to be added is printed in this black type.

Matter proposed to be omitted is printed in this small type.

It is assumed that the objects aimed at by the Promoters of a Competition are towards procuring the best design for the purpose in view, together with the promotion of the best interests of the art of architecture, and securing the most scrupulous fairness towards the Competitors.

If the Promoters of an intended Competition desire members of the Royal Institute of British Architects **and Allied Societies** *to take part therein, the conditions should be based on the following suggestions :—*

1.—The Promoters of an intended Competition should, AS THEIR FIRST STEP, appoint one or more professional Assessors, architects of established reputation, whose appointment should be published in the original advertisements and instructions. The selection of an Assessor should be made with the greatest possible care, as the successful result of the Competition will depend very largely upon his experience and ability. **In works of great architectural importance or of a highly technical character it is desirable that a jury of three Assessors be appointed.**

The President of the Royal Institute of British Architects is always prepared to act as honorary adviser to Promoters in their appointment of Assessors.

All the designs sent in should be submitted to the Assessors.

2.—The duty of Assessors should be, after conference with the Promoters—

(*a*) To draw up the particulars, conditions, and suggestions, in accordance with these Regulations, as Instructions to Competitors, such documents to be so drawn up as to form an agreement between the Promoters and the Competitors, and also to advise the Promoters upon the question of cost and the amount and apportionment of the premium or premiums.

Note.—It is essential in drawing up the Instructions to state definitely which of the Conditions must be strictly adhered to, and which of them are merely optional or of a suggestive character.

Answers to questions asked by any Competitor should be communicated to all the Competitors.

(*b*) To determine whether the designs conform to the Instructions, and to exclude any which do not.

(*c*) To advise the Promoters on the relative merits of the designs admitted to the Competition, and to make a selection in accordance with the Instructions.

3.—No Promoter of a Competition, and no Assessor engaged upon it, nor any employee of either, should compete **or assist a Competitor,** or act as architect, for the proposed work.

4.—The number, scale, and method of finishing of the required drawings should be distinctly set forth, and they should not be more in number, or to a larger scale (**as a general rule, $\frac{1}{16}$ in. scale for plans, sections, and elevations will prove sufficient**) than necessary to clearly explain the design, and such drawings should be uniform in size, number, mode of colouring, and mounting. If the Assessor advises that perspective drawings are desirable, it should be so stated.

5.—Competitions should be conducted in one of the following ways :—

(*a*) By advertisement, inviting architects willing to compete for the intended work to send in designs. The Promoters, with the advice of the Assessor or Assessors, should make their selection from such designs. The author of the design awarded the first place should be employed to carry out the work. **In Competitions for public works involving the expenditure of public money this method is recommended.**

(*b*) By advertisement, inviting architects willing to compete for the intended work to send in their names by a given day, with such other information as the Candidate may think likely to advance his claim to be admitted to the Competition. From these names the Promoters, with the advice of the Assessor or Assessors, should select a limited number to compete, and each Competitor thus selected should receive a specified sum for the preparation of his design. The author of the design awarded the first place should be employed to carry out the work.

(*c*) By personal invitation to a limited number of selected architects, to join in a Competition for the intended work. Each Competitor should receive a specified sum for the preparation of his design. The author of the design awarded the first place should be employed to carry out the work.

6.—No design should bear any motto, device, or distinguishing mark ; but all designs should be numbered by the Promoters in order of receipt. Any attempt to influence the decision of the Promoters, or of the Assessor or Assessors, should disqualify a Competitor.

7.—The author of the design placed first by the Assessor or Assessors *should be employed to carry out the work,* and he should be paid in accordance with the Schedule of Charges sanctioned and published by the Royal Institute. If no instructions are given to him to proceed within twelve months from the date of selection, or if the proposed works are abandoned by the Promoters, then the selected architect should receive payment for his services in connection with the preparation of the Competition drawings of a sum equal to 1½ per cent. on the amount of the estimated expenditure. If the said author should be subsequently employed, the 1½ per cent. previously paid to him should merge in his ultimate commission.

8.—In every case the amount of premiums or remuneration for the competitive designs should be fixed under the

advice of the Assessor or Assessors, **and the amount of the premium (if any) awarded to the successful Competitor should not be merged in the fees paid him for carrying out the work.**

9.—Where a deposit is required for supplying the Instructions, it should be returned on the receipt of a *bona fide* design; or, if the applicant declines to compete and returns the said Instructions, within a month after the receipt of replies to Competitor's questions. The deposit required should not exceed the sum of one guinea.

10.—Each design should be accompanied by a declaration, signed by the Competitor, stating that the design is his own personal work, and that the drawings have been prepared under his own supervision **in his own office. And the Promoters shall reserve the right to require evidence in support of this from the authors of the premiated design, and also the right to investigate, and if necessary withhold the premium, if such investigation is not satisfactory.**

11.—A design shall be excluded from a Competition—

(*a*) if sent in after the period named (accidents in transit excepted);

(*b*) if it does not substantially give the accommodation asked for;

(*c*) if it exceeds the limits of site as shown on the plan issued by the Promoters, the figured dimensions on which should be adhered to;

(*d*) if the Assessor or Assessors should determine that its probable cost will exceed by 10 per cent. the outlay stated in the Instructions, or the estimate of the Competitor should no outlay be stated. If the Assessor or Assessors be of opinion that the outlay stated in the Instructions is inadequate, he or they shall not be bound in the selection of a design by the amount named in such Instructions, but the question of cost shall nevertheless be a material element in the consideration of the award;

(*e*) if any of the other Instructions are violated.

12.—It is desirable that all designs and reports submitted in a Competition, except any excluded under Clause 11, should, with the consent of their authors, be publicly exhibited after the award has been made, which award should be published at the time of exhibition.

13.—It is essential to the success of any Competition that the Promoters should agree in their Instructions that the award of the Assessor should be adhered to, unless he shall be satisfied, upon some objection being raised to the employment of the author of the selected design to carry out the work, that such objection is valid. **The setting aside of the Assessor's Award for any other reason constitutes a breach of faith on the part of the Promoters.**

14. In the case of works of considerable magnitude it is desirable that three Assessors should be appointed. As stated above, the President of the Institute is always ready to advise on this or other points.

As stated above, the President of the Institute is always ready to advise on all matters respecting Competitions, and Promoters are strongly recommended to place themselves in communication with him when instituting a Competition.

*** *The usual R.I.B.A. Scale of Charges for Assessing Competitions, whether by a jury or otherwise, is the sum of Thirty Guineas plus* one-fifth **one-fourth** *per cent. upon the estimated cost of the proposed building.*

Mr. A. Saxon Snell [*F.*], having been called upon by the Chairman, said that the policy of the Institute so far in regard to competitions might be described as follows:—The Institute, in effect, said to promoters, "We do not advise competitions, but if you wish to have a competition and want our assistance in the matter, we must urge upon you the adoption of certain conditions in order that the competition may be conducted fairly and properly." He hoped that would continue to be the policy of the Institute. The amendments he had to propose were directed to two ends: first of all, to make the regulations so clear that "he who runs may read"; and secondly, that they should be framed to meet as many contingencies as possible. The regulations now before them did not seem to have been put together in that proper sequence which was so necessary in a document of this kind. They started with an assumption as to the objects aimed at by promoters which, if he might say so, had a distinctly Pecksniffian flavour. Then they went on to deal—and rightly—with the promoters. Then in the same clause they had put in, "All the designs sent in should be submitted to the Assessors." Why that should come in there he did not know; it had nothing to do with that clause at all. The next thing was the duties of assessors, and these were entered into rather at length, only they were all mixed up, and the framers of the document did not appear at all clear as to what the duties were. Then they came to No. 3, which practically should come in No. 2—it was part of the duty of the assessor; or rather it was not his duty, it was something he should not do. No. 4 also had to do with how the assessor should draw up the conditions. Then apparently they went back to the very beginning again, to suggest how a competition should be conducted—whether (*a*) by advertisement, inviting architects to compete; (*b*) by personal invitation to a limited number, &c. Upon that clause he had a very important amendment to propose. Coming to No. 6, that, he thought, should come as part of No. 4. Then in No. 7 they came to the very end of the competition, dealing with the question of what should be done with the winner of the competition. In No. 8 the framers went back again to the question of how the premiums should be dealt with, and in No. 9 they went still further back to the question of the deposit. No. 10, which sets out causes for disqualification, deals really with the end of the whole matter. Then No. 11 gives more directions to the assessor, and No. 12 deals with the last thing of all—public exhibition of drawings. No. 13, which follows, is really part of No. 7. Following No. 13 is a sort of little reminder, "Please remember the Institute." Then at the end an extra little paragraph in italics with three stars—what the three stars were for he could not understand—noting what the scale of charges of the assessor should be. He thought he had said enough to show that these regulations were not in proper order, and he would now deal with them clause by clause. In the heading he would suggest the insertion of the words "the conduct of," so as to read "Regulations approved by the R.I.B.A. for the Conduct of Architectural Competitions." In place of the two preliminary clauses he proposed the following:—"It is assumed that the object of the promoters is to obtain the best design for the purpose in view, in this way maintaining the highest interests of the art of architecture. This object may best be obtained by conducting all competitions upon the lines laid down in the following regulations, which have been framed with the view of securing the best results for the promoters with scrupulous fairness to the competitors." That, he suggested, met all they wanted to say there in a few words.

Mr. Herbert Shepherd [*A.*] objected to the words "It is assumed," which seemed to suggest a possibility of doubt. A document such as this, intended for all sorts of people, ought not to start off with an assumption. It would be better simply to state, "The objects aimed at by promoters of a competition being to procure the best design for that purpose, absolute fairness towards competitors, and the promotion of the art of architecture," &c. A precise statement of that kind would be much better, in his opinion. Then he would continue: "If it is desired that members of the R.I.B.A. and Allied Societies should take part therein, the conditions should be based on the following suggestions."

Mr. E. M. Gibbs [*F.*] (Sheffield) said he agreed with Mr. Saxon Snell that the document should be arranged in better sequence, and no doubt the Committee would consider that point when the suggestions of the meeting were before them. It was impracticable to settle every word of the document by voting in such a meeting as the present, but there were some points that could readily be settled, and one of the main points was that these should be distinctly understood to be "regulations" and not "suggestions." The word "suggestions" occurred at the end of the second paragraph, and throughout the document the word "should" was used. He thought it should be "shall" throughout, so as to make it definite. If the Institute took a decided line they would get the support of promoters and the profession far more readily.

Mr. W. Gilmour Wilson [*F.*]: It is one thing to say "shall" to members of the Institute, but I do not think you can say "shall" to promoters.

Mr. Gibbs: If promoters wish to have our support we have a perfect right to say they "shall," &c.

The Chairman said he thought they were now getting to a line of cleavage between two particular policies. It had been settled in the By-laws that they were to have control over their own members in the matter of architectural competitions, but they could not control the promoters of a competition. If they were to say to promoters, "We have such control over our own members that if we say they shall not take part in a competition, they must not do so except at the risk of expulsion from this body, and you cannot run a competition in this country on any other terms than those laid down in our regulations?"—if they took such a line as that they would no longer be able to make suggestions to promoters. That was his personal view, and he had come in contact a good deal with promoting bodies. People were not bound to accept their regulations, and could do very well without coming to the Institute, but this would be very much to the detriment of architecture as well as of the profession.

Mr. Saxon Snell suggested the insertion of the following sentence to meet the Chairman's point: "Members of the R.I.B.A. and Allied Societies are recommended to compete only under conditions based on these regulations."

Mr. Gibbs: To the word "shall" there is a condition precedent—viz. "if the promoters of a competition desire members of the Royal Institute to take part." If members of the Institute are to take part in a competition, they should state firmly on what conditions they will do so.

Mr. Wilson: Is it worth while discussing whether we should use "shall" or "should" until the form of the paragraph is decided?

The Chairman: I think it desirable that we should get an expression of the different views held by members who have taken part in important competitions, and we are extremely glad to have Mr. Fenton and Mr. Gibbs here to give us the views of provincial members. We should then refer the regulations back to the Committee to consider these views and to revise the document so far as consistent with what they think the true interests of the profession.

Mr. H. P. Burke Downing [*F.*] said it was very desirable that the regulations should be so worded as to clearly form part of a contract between the promoters and the competitors; but, owing to the way the proposed Regulations were drawn, it was a little difficult to see how the points he desired to emphasize should be brought in. He suggested (*a*) a new clause between 5 and 6 as follows: "Invitations to compete, whether personal or by advertisement, should state that the conditions of the competition will comply with the Regulations approved by the Royal Institute of British Architects for Architectural Competitions"; and (*b*) Clause 13 might be amended (the last part thereof) as follows: "The setting aside of the Assessor's award for any other reason constitutes a breach by the promoters of the contract between them and the competitor established by the conditions of competition, his entry in accordance therewith, and the Assessor's Award."

The Chairman said it would be competent to Mr. Burke Downing to bring his amendments forward under the proper headings. At the present moment they were dealing with the first and second paragraphs.

Mr. W. Henry White [*F.*] supported Mr. Saxon Snell's combination of the two preliminary paragraphs, but would alter the word "suggestions" to "regulations."

Mr. H. Hardwicke Langston [*F.*] said that in all references to the action of promoters the word "should" might perhaps properly be used; but in dealing with the duties of assessors they ought to be more emphatic and say "shall." An assessor, being a member of the Institute, and probably nominated by the President, ought to be compelled to take a certain line. It was essential that competitors should have proper fair play, and when an assessor was appointed they ought to feel that they could rely upon him.

The Chairman: This document is not issued to assessors, but to promoters of competitions. Special instructions to assessors might be brought up at a later stage.

On the proposition being made that the two preliminary paragraphs be amended on the lines suggested by Mr. Saxon Snell, with the word "suggestions" altered to "regulations," the Chairman said he thought the best course would be, instead of passing any specific resolution of that kind, to allow members to discuss the document paragraph by paragraph, and then to come to some general resolution.

Mr. A. R. Jemmett [*F.*] suggested that there should be two documents—one to send to promoters, starting with the paragraph suggested, stating what was assumed to be their object, but in which they should not go into all these details of domestic discipline among members. These latter should be reserved for another document altogether, containing regulations binding upon members.

The Chairman: The Paper that used to be issued a few years ago was called Suggestions, and it took many years to get those Suggestions turned into Regulations. The result has been beneficial, because the document, having the title of Regulations, does undoubtedly convey to promoters the impression that they are binding upon members, and that promoters will not get the best competition unless they comply with them.

Mr. Jemmett: I am most keen on there being regulations, but I am strongly of opinion that, if this document is to be sent to promoters, much of the detail ought to be struck out. When the competition comes on, it is for the assessors to lay down these matters—on what line they will disqualify a man, for instance—because they vary so much in every competition, and they do not matter much to outsiders. I support the first clause, though the wording is a little vague and clumsy and requires some modification. I think we are quite right in assuming that one object aimed at is the promotion of architecture. Promoters ought to be given credit for such intentions; they will then come to have them, even if they were without them before.

Mr. Gibbs: As a matter of policy, it is desirable that these should go out as regulations, and be very clear and very full, because, if the competitions get into the hands of secretaries of committees, and the Institute regulations are not before them, they will lay down regulations which are not in accordance therewith, and we shall be worse off than before. I have known open competitions where our old regulations have been extremely useful in the hands of the secretary of an architectural society; he has been able to put them before promoters, saying, as it were, "These are the regulations of our Institute; think them over, base yours on them, and you will be all right." But for such a purpose our regulations ought to be made quite full and very definite.

Mr. Langston: Mr. Jemmett's proposal, I think, is an

excellent one. A short paper of recommendations might be sent to promoters, accompanied with a separate paper setting out the duties of the assessor. On the paper to go to promoters the scale of charge for assessors and other matters affecting them should be stated, together with an exact indication of their duties in the conduct of the competition and the reason for appointing them.

The meeting then passed to the consideration of Clause 1.

Mr. SAXON SNELL suggested that the concluding sentence, "all the designs sent in should be submitted to the assessors" would come better in No. 2.

Mr. GILMOUR WILSON: Why not say that the promoters' first business is to consult the President of the Institute, who should advise?

THE HON. SECRETARY: They may have their own assessor on the spot.

Mr. WILSON: Is it better for them to select their assessor on the spot?

THE HON. SECRETARY: No; but as long as they have a competent assessor we do not want them to come to the President.

Mr. GIBBS: A local assessor is often better qualified.

Passing to the consideration of Clause 2,—

Mr. GIBBS said he had some important amendments to propose—the result of his own experience as an assessor. Instead of the first paragraph (*a*), he would suggest something on the following lines: "It is essential that the instructions shall be drawn up under four separate headings: (1) Particulars of general information; (2) Conditions, non-compliance with which shall exclude any design; (3) Suggestions, the adoption of which in any design is optional; and (4) Contract between promoters and competitor." He had found in his own experience that by setting out the matter in this way he had cleared his own mind to begin with. He had thought the whole thing over and made up his mind as to what he could recommend to committees as conditions to be strictly complied with. He had talked it over with committees beforehand, and they had been prepared then to abide loyally by those conditions. He had been thanked again and again by competitors for making his conditions and suggestions so entirely separate. If the amount to be expended was to be a definite sum, it should be put under the head of Conditions; if to be only suggestive, it should be put under the head of Suggestions; and nothing need be said about 10 per cent.

Mr. SAXON SNELL suggested that Clause 2 should be recast as follows: "The duties of the assessor should be as follows, viz.: (*a*) To confer with the promoters and offer general advice upon the practicability of their desires; and especially on the question of cost. (*b*) To draw up instructions for the guidance of competitors and for the conduct of the competition. (*c*) To answer queries raised by competitors within a limited time during the preparation of the designs. To open or superintend the opening of the parcels or cases containing the designs. (*d*) To examine *all* the designs submitted and to determine whether they conform to the conditions of competition and to exclude any which do not. (*e*) To advise the promoters on the relative merits of all the designs admitted, and to make a selection of those he considers the best, and to place them in order of merit, and to award the premiums (if any) in accordance therewith." Then to those clauses he would add the following: "Note to (*a*) Clause 2. The assessor should also advise as to the amount of the premiums or remuneration (if any) for the competitors." Then a "Note to (*b*)," which would meet Mr. Gibbs' view: "The Instructions should comprise (1) an agreement between the promoters and the competitors containing those conditions and Instructions which are meant to be strictly adhered to under a penalty of exclusion from the competition. These should be as few and as simple as possible, and stated without ambiguity, and the assessor should satisfy himself that any conditions imposed by the promoters are reasonable and practicable." That they would recognise as very important. "(2) Schedule of accommodation required. (3) General suggestions (if any) indicating desirable features, arrangement of rooms and other matters, attention to which should be entirely optional, it being desirable to allow the widest scope for the free play of ideas and ingenuity; (4) Plans with dimensions, levels, and other particulars of site or existing buildings affected." Then the "Note to (*c*)": "Copies of these queries and the answers should be sent simultaneously to each and every competitor. The time within which queries are permitted should be limited so as to allow ample time after the replies have been given for the final preparation of the designs." These details seemed perhaps very elaborate, but in his experience assessors did not always think of these things, and it was just as well they should have them clearly before them.

Mr. JEMMETT agreed that the whole of the conditions must be strictly adhered to, but his point was that there should be no absolute conditions whatever in a competition except the facts of the case, beyond which no assessor could go. Two only of the conditions could be absolute. There was the site—that must be kept to; and there was the accommodation to be put upon the site. It was impossible to say it could be done for a certain specified sum of money; they should say about a certain sum. He had been engaged in a competition lately, and had spent any amount of time in trying to find out the mind of the assessor and what he meant when he said what amount of colour they might or might not put in their drawings. There should be no such regulations. If a man liked to use a brush, why should he draw in pen-and-ink just to please an assessor? Let each man do as he pleases.

THE HON. SECRETARY: To his own scale?

Mr. JEMMETT: Yes, no scale whatever should be laid down. Men worked in such different ways; some worked on a very small scale and some on a bigger. He made his first sketches of large designs to something like an eightieth, and to enlarge the whole of the drawings to as big a scale as a sixteenth was so much waste of spirit and waste of labour. Let the assessor say, Illustrate your design in such a way as we can understand it; if you do not, it will be at your own risk. Surely the assessor could judge the design quite well whether it was pen-and-ink or whether it was brush-work. Also he was quite opposed to all these highly-finished drawings; the assessor had much better ask for the architect's own personal work, the sketches that he makes himself. When he had his design complete, instead of taking it to the office to be drawn, he could just send it to the assessor; if he could not understand it, the man in the office could not. They should save themselves and the assessor a great deal of trouble in that way. It was these irksome and worrying conditions that gave them so much work. If the conditions were altered, in the first place the profession would spend half the amount of money that they spend now; and secondly if the result of competitions was certain it would stop men entering for them. Competitors should be given to understand that they had not the least possible chance unless theirs was the best design.

Mr. SHEPHERD: On the question of policy, with regard to (*c*) "To advise the promoters on the relative merits of all the designs," the Committee in drafting the regulations should bear in mind very strongly that the assessor (owing a duty to the competitors as well as to the promoters) should report briefly upon the design of every competitor, and in detail upon the selected ones, so that the promoters might know on what grounds a design had been either accepted or rejected.

On the motion of Mr. GILMOUR WILSON, seconded by Mr. SAXON SNELL, the debate was adjourned at 10 o'clock.*

* Consideration of the Regulations was resumed at the Business Meeting, 28th February, with the result recorded in the Minutes [p. 392]. The report is held over for the next issue.

Town Planning Conference, London, 11-16 July 1910.

The list of Hon. Vice-Presidents of the Conference, now almost complete, includes the following:

The Hon. Whitelaw Reid.
His Grace the Archbishop of Canterbury.
His Grace the Archbishop of York.
His Grace the Duke of Norfolk, K.G.
His Grace the Duke of Argyll, K.T.
The Right Hon. the Earl of Lytton.
The Right Hon. the Earl of Crewe.
The Right Hon. the Earl of Plymouth.
The Right Hon. Viscount Portman.
The Right Hon. Viscount Milner, G.C.B.
The Right Hon. the Lord Bishop of London.
The Right Hon. the Lord Bishop of Birmingham.
The Right Hon. Lord Strathcona and Mount Royal, G.C.M.G., G.C.V.O.
The Right Hon. Lord Curzon of Kedleston, G.C.S.I.
Lord Redesdale, G.C.V.O.
Lord Balcarres, M.P.
The Right Hon. John Burns, M.P.
Sir Edward Poynter, Bart., P.R.A.
The Hon. Mr. Justice Neville.
The Right Hon. the Lord Mayor of London.
The Chairman of the London County Council.
The Very Rev. the Dean of Westminster.
The Right Hon. Alfred Lyttelton, M.P.
Colonel Sir Herbert Jekyll, K.C.M.G.
Sir John Wolfe Barry, K.C.B.
Sir Gilbert Parker.
Sir George Gibb.
Sir Lawrence Alma-Tadema, O.M., R.A.
Mr. Thomas Brock, R.A.
Mr. T. G. Jackson, R.A.
Mr. Edmund Gosse, LL.D.
Mr. J. C. Inglis, President Inst.C.E.
Mr. Alexander R. Stenning, President Surveyors' Inst.
Mr. T. C. Horsfall.
Mr. Ebenezer Howard.
Mr. W. H. Lever.

Among the functions of the week besides those previously announced [see JOURNAL, 5th February] will be the entertainment of members of the Conference at a *soirée* to be given by the Royal Institute. By the date of the Conference the Institute will be in possession of the Conduit Street Galleries in the rear of its present premises, and will have all the accommodation necessary for a social gathering of this kind.

Proposed Revision of the Schedule of Charges.

A circular letter in the following terms is being issued to members with the present issue:

DEAR SIR,—The Council of the Institute, in pursuance of a Resolution of the general body of members, have referred to the Practice Standing Committee for consideration and report the question of the desirability of revising the Schedule of Charges now issued as "The Professional Practice as to the Charges of Architects," and members are invited to express their views upon the subject, and particularly to reply to the two questions set forth on the accompanying pages, adding any further remarks which they may deem desirable upon the subject generally.

As the matter will be dealt with and reported on at an early date, it is particularly requested that replies and suggestions be sent to the Secretary not later than Tuesday, 12th April.—Yours faithfully, IAN MACALISTER, *Secretary*.

The questions referred to are as follows:—

Question I.—Have you experienced any special difficulties, questions, or disadvantages in adopting the Schedule of Charges as at present sanctioned and published by the Royal Institute?

Question II.—Please state any amendments or modifications which you may consider advisable in the Schedule referred to.

Special Election to the Fellowship.

The Council at their meeting last Monday, acting under the proviso to By-law 9, unanimously elected to the Fellowship Mr. JOHN BENNIE WILSON [*A.*], President of the Glasgow Institute of Architects, of 92 Bath Street, and 45 Fotheringhay Street, Glasgow.

Cost of Public Elementary School Buildings.

Mr. Walter Runciman, the President of the Board of Education, has been much impressed, it is stated, with the great cost of erecting school buildings in accordance with modern standards of suitability and convenience, and in view of the urgent need for new buildings he desires to offer every encouragement to the responsible authorities to submit proposals calculated to reduce expenditure. The plans of modern schools are determined by educational and hygienic considerations, and do not admit of modifications which would greatly reduce the cost, nor can much be done in this direction by eliminating unnecessary or extravagant features; but by the adoption of new methods of construction and new materials it is thought a substantial saving might be effected, at all events in some localities. Mr. Runciman has therefore appointed a Committee consisting of three members to consider the matter on strictly practical lines and to report at an early date.

The following are the draft terms of reference:

(*a*) Whether the cost of buildings for public elementary schools can properly, and with due regard to their suitability and durability, be reduced by the use of materials or methods of construction different from those ordinarily employed at present; and, if so,

(*b*) What steps should be taken to facilitate the adoption of such materials or methods, and whether any alteration in the law is required for the purpose.

The Committee is composed of: Chairman, Mr. L. A. Selby-Bigge, C.B., Principal Assistant Secretary of the Elementary Education Branch of the Board of Education; Mr. N. T. Kershaw, C.B., Assistant Secretary of the Local Government Board; Mr. F. Clay, Architect of the Board of Education; with Mr. J. G. Milne, Senior Examiner of the Board of Education, as secretary. The Committee will sit and receive evidence with a view to reporting as soon as possible.

The Scottish Local Government Board.

The Secretary for Scotland has been in communication with the Treasury in regard to the addition of certain officers to the staff of the Local Government Board for Scotland, with the view more especially of securing an efficient administration of the Housing and Town Planning Act.

It is proposed to appoint an engineering inspector, who will specially concern himself with town planning work, and have as assistant another inspector with special architectural qualifications.

Obituary.

Mr. ALFRED BURNELL BURNELL, who died after a few days' illness on Friday, 18th ult., aged forty-nine, was elected Fellow of the Institute in 1892, and had been a member of the Board of Examiners (Architecture) since 1903. He served his articles with Mr. A. W. N. Burder, and after three or four years as assistant in the offices of the late Arthur Baker, Messrs. Giles and Gough, and others, started in independent practice in 1882. His practice was chiefly in domestic work, private residences and business premises in London and suburbs. His most important buildings were the large residence, stables, and offices at Farnham for Mr. Cyril A. Pearson. He also rebuilt the late Sir John Bennett's premises in Cheapside.

Mr. EDWARD SHEWBROOKS, of the firm of Messrs. Shewbrooks and Hodges, of Newcastle-upon-Tyne, whose death occurred on the 5th February, was elected Fellow of the Institute in 1881. Mr. Shewbrooks was articled to the County Surveyor of Somerset in 1856. Coming to London in 1861 he was engaged successively in the offices of Messrs. Lockyer and Morant, Mr. R. P. Pullan, Mr. Somers Clarke, and afterwards as managing assistant to Mr. G. Bidlake, of Wolverhampton, and Mr. G. Crickmay, of Weymouth. He commenced independent practice in Newcastle-upon-Tyne in 1873. He designed and carried out schools for the Tudhoe School Board, Durham, and for the Allendale School Board, Northumberland; the Parsonage House, Allenhead, Northumberland; Baltic Chambers; offices at the Quayside and Guildhall Chambers, Newcastle; stables and carsheds for the tram service at Newcastle and Gosforth. He also designed the Central Co-operative Stores, Newgate Street, branch stores at Benwell and Jesmond, etc., and the Home for Incurables at Spital Tongues. Mr. Shewbrooks was a member of the Northern Architectural Association.

OSMAN HAMDHI BEY, Director of the Imperial Museums in Constantinople, whose death is announced, had been an Hon. Corresponding Member of the Institute since 1891. Born in Constantinople in 1842, he was sent to study Western jurisprudence in Paris, and found time also to study at the École des Beaux Arts, and to acquire a keen interest in art. On his return to Turkey he entered the public service, becoming in 1868 Vali of Baghdad, and afterwards filling other important posts. In 1882 he was appointed Director of the Imperial Museums, and became the means of putting a stop to the export of the antiquities found in the Turkish Empire, gathering them together in the museums in the capital, and making them accessible to students. When the discovery of the sarcophagi, which now form the great feature of the Constantinople collection, was reported, Hamdhi Bey hastened to Sidon and superintended their removal to Constantinople. Hamdhi Bey was himself an artist, and exhibited both at the Paris Salon and at the Royal Academy.

Mr. J. M. SWAN, R.A.—In the notice in the last issue Mr. Swan's age was erroneously given as seventy-two years instead of sixty-two.

ALLIED SOCIETIES.

Devon and Exeter Architectural Society. — The Annual Meeting of this Society was held at the Royal Clarence Hotel, Exeter, on 19th February, the President, Mr. William H. May, in the chair. The annual report and balance sheet having been presented and adopted, the President delivered an address, in the course of which he referred to the recent decision of Mr. Justice Grantham in Shoolbred *v.* Wyles and Migotti concerning the responsibilities of architects for dry rot, as one that should be carefully remembered and be a word of warning to them all. He had been particularly requested to draw their attention to the Town Planning Act. The Royal Institute was organising a Conference to be held in London in July, and he hoped many of their members would be able to attend. One of the first items on the programme of their Council would be the consideration of the formation of a Town Planning Committee. It often occurred when staying in a new district that one knew nothing of the buildings worth visiting. He was glad to see that the Royal Institute was compiling a work to supply this want. The West was full of interesting detail, and it would greatly assist this work if members would notify the Secretary of any good work that they came across in their professional as well as their private rambles. Touching the question of registration, little or nothing had been done during the past year to bring this matter to a head. Legislation in the form of an Architects' Registration Bill would do much to improve their position. Even the Colonies realised the imperativeness of the movement, and had taken steps to protect themselves against the inroads of the adventurer. They in the provinces had to suffer from the immoral practices of self-styled architects to an extent probably unknown to the leaders at the Royal Institute. He, like his predecessor in the chair, felt very strongly the laxity and indifference displayed by the parent Society in this most urgent matter. One hardly knew what to say with reference to the present style of design. Undoubtedly unless it was adopted the competitor would not stand a chance, as, so far as one could judge, assessors' ideas ran at present in very similar grooves. The artistically-broken sky-lines of the past were considered quite obsolete, and ponderous structures with heavy classical cornices and parapets were in vogue, and in a recently-accepted design for a national building not even a chimney was shown to break the flatness.

Leeds and Yorkshire Architectural Society.—Mr. J. B. Fulton [*A.*], on the 24th February, read a Paper on "The Church of Santa Sophia, Constantinople," the illustrations including an interesting series of his own measured drawings and sketches.

Glasgow Institute of Architects.—The Council in their annual report state that during the past year they have had frequently before them conditions of competitions promoted in their district which were found to be unsatisfactory. In these cases representations were made to the promoters, and in several instances the Council had been successful in effecting the desired amendments. A scheme for the better regulation of competitions in their district had been prepared by the Council, but as the whole subject was under consideration by the R.I.B.A. the matter had been postponed, as it was thought inexpedient to anticipate the action of the parent body. The Council note with interest that the R.I.B.A. has appointed a committee of its members in London and elsewhere throughout the country to arrange an exhibition of architecture along with sculpture and the constructive and decorative crafts, which is expected to be held under the auspices of the Royal Academy in London in the autumn or winter of 1911. They hope that it may be found possible for the Exhibition to be held afterwards in some of the principal centres throughout the country, including Glasgow. The Glasgow Institute would be prepared, if occasion arises, to take an active part in the promotion of such a scheme in their locality. The Associate Members' Committee report that some excellent Papers have been read, but the attendances in all cases have been so unsatisfactory that they have resolved to cancel the remaining papers of the Session.

Aberdeen Society of Architects.—The annual general meeting was held on the 1st March at the Northern Arts Club, Mr. Arthur Clyne [*F.*], *President*, in the Chair. The annual report having been adopted, and office-bearers elected for the ensuing year, the President addressed the meeting. One of the objects, he said, which he hoped to help forward was the bringing about of some sort of union with the Aberdeen Architectural Association. It was not satisfactory this existence in Aberdeen of two separate and distinct architectural societies. It would be a gain and tend greatly to advance the aims and aspirations of both were the two to become merged in one solid body, united in their efforts to further the interests of architecture generally, while safeguarding and upholding their professional interests. Another object they had in view was the acquisition by the Society of premises of their own. Financial considerations had hitherto prevented the accomplishment of that object, but a step in the right direction had been taken in the arrangement recently entered into with the Northern Arts Club, under which, on payment of a small sum, the Society had now the use of one of its rooms on all suitable occasions. The need for more frequent opportunities of meeting together having been felt, it had now been decided that, in addition to the annual general meeting, other general meetings should be held at intervals of about three months. This would keep members in touch with the affairs of the Society, and would give members additional opportunities of conferring together. The personal element in such a society as theirs was an important consideration. Referring to the matters falling to be dealt with under the Housing and Town Planning Act, Mr. Clyne said it was of the utmost importance that the promoters should be assisted by expert opinion based on a knowledge of the subject from an artistic and architectural as well as the strictly engineering or land-surveying point of view. The business of town planning was a matter which they, as architects, were justified in considering as a legitimate part of their practice, and it was their duty to take such steps as might seem necessary to protect their interests and to guard against the danger of the carrying out of such work gradually drifting into the hands of municipal bodies to the exclusion of members of the architectural profession. It was satisfactory to note that the Royal Institute of British Architects, alive to the importance of the matter, had decided to organise a Conference for the purpose of studying the architectural problems involved in the improvement and extension of our cities. As a Society it would be their duty to do all in their power to make the Conference a success, both in the number of its members and in the value of the work done. Referring to "Registration," Mr. Clyne said that seldom had any subject given rise to such general interest or been productive of so much strongly expressed difference of opinion as the vexed question of registration or the compulsory enrolment of architects. On the one side was the large body who held that in the interests of the profession no one not registered as an architect should be entitled legally to practise as such, and on the other side those—numerically no doubt the smaller party, but including in their number many men of the highest standing in the profession—who contended as strongly that such a movement would be prejudicial to the best interests of architecture as an art. It must be a matter of satisfaction that by the recent action of the Royal Institute this difficult and troublesome matter had now been removed from the sphere of active discussion. In April 1906, after exhaustive consideration, the Committee of the Institute appointed to consider and report on the matter recommended that the Charter of the Institute should be revised, so as to raise the qualification of the profession, and that a Bill should be promoted in Parliament to give statutory force to the Charter, legalise the scale of charges, and deal with other important matters. This recommendation was adopted at a general meeting of the Institute, the details being referred to the Council for further consideration and report, and ultimately, at a general meeting of the Institute in December 1908 the Council's proposals for the revision of the Charter were carried with only slight verbal alterations. The Revised Charter was now an accomplished fact, and the new Bylaws await only the approval of the Privy Council. The main object of the changes made in the Charter and Bylaws was to secure that those engaged in the practice of architecture shall have undergone a proper course of training, having passed examinations as to their knowledge of building construction and studied the principles of design. The new class of Licentiates established would enable large numbers of architects to join the Institute, with the result that eventually it would embrace practically the whole profession, thus greatly enlarging the power and influence of the central body. On the whole, the final adoption by the Institute of the changes embodied in the new Charter and Bylaws might be regarded as a fairly satisfactory settlement of a difficult question, and as likely to produce in the future satisfactory results in regard to the advancement of architecture and the placing of the profession generally on a sounder footing.

COMPETITIONS.

Secondary School at Peterborough.—The Competitions Committee announce that they have been in communication with the promoters, and that they are now satisfied with the Conditions of this Competition.

Glazed Brickwork.—Mr. Max Clarke [*F.*] has been appointed by the President to act as assessor in a competition for designs for works to be executed in glazed brickwork, and for essays dealing with the advantages to be derived from the use of this material. The promoters are a Committee of Glazed Brick Manufacturers, and prizes of 100 guineas, 50 guineas, and 25 guineas are offered.

MINUTES. IX.

At a Special General Meeting held Monday, 28th February 1910, at 8 p.m.—Present: Mr. A. W. S. Cross, M.A., Oxon., *Vice-President*, in the Chair; 26 Fellows (including 8 members of the Council), and 15 Associates (including one member of the Council)—the Minutes of the Special General Meeting held Tuesday, 8th February 1910 [p. 352], were taken as read and signed as correct.

The Chairman announced that the Meeting was convened, pursuant to By-law 64, to elect the Royal Gold Medallist for the current year, and having moved in accordance with notice that Mr. Thomas Graham Jackson, R.A., be elected for the honour, it was unanimously

RESOLVED, that subject to His Majesty's gracious sanction the Royal Gold Medal for the promotion of Architecture be awarded this year to Mr. Thomas Graham Jackson, R.A., for his executed works as an architect.

The Special Meeting then terminated.

At the Ninth General Meeting (Business) of the Session 1909-10, held Monday, 28th February 1910, at the conclusion of the Special General Meeting above referred to, and similarly constituted, the Minutes of the Meeting held 14th February were taken as read and signed as correct.

The Hon. Secretary announced the decease of Edward Shewbrooks, *Fellow*, and Osman Hamdhi Bey, *Hon. Corresponding Member*.

The Hon. Secretary having further announced the decease of Alfred Burnell Burnell, *Fellow*, for some years member of the Board of Examiners, a vote of sympathy and condolence was passed to the widow and family of the late member.

The Hon. Secretary formally acknowledged the receipt of books presented to the Library, and a vote of thanks to the donors was passed by acclamation.

The following Associate attending for the first time since his election was formally admitted by the Chairman—viz. Charles Benjamin Smith.

The following candidates were elected by show of hands under By-law 9:—

AS FELLOWS (3).

ATKINSON: THOMAS DINHAM [*A.* 1889] (Cambridge).
NOBBS: PERCY ERSKINE, M.A. [*A.* 1900] (Montreal).
PATERSON: ALEXANDER NISBET [*A.* 1890] (Glasgow).

AS ASSOCIATES (40).*

AINSWORTH: JOHN COOPER, M.A. [*P.* 1903, *S.* 1908] (Manchester).
ALLEN: JOHN GORDON [*P.* 1902, *S.* 1907].
ATKINSON: ROBERT [*Special Examination*], *Tite Prizeman* 1905.
AUTY: JOSIAH [*Special Examination*] (Morley.)
BLUHM: QUENTIN MANGNALL [*P.* 1902, *S.* 1904] (St. Anne's-on-the-Sea).
BOUTCHER: CHARLES GEOFFREY [*P.* 1904, *S.* 1905, *Qualified* June 1908].
BRYAN: ARTHUR FRANCIS [*P.* 1902, *S.* 1906].
BURSTOW: GEORGE HERBERT [*Special Examination*] (Brighton).
CHAPMAN: RICHARD THWAITE [*P.* 1904, *S.* 1906] (Bolton).
CLAYPOLE: EDWARD ERNEST BLUNT [*P.* 1898, *S.* 1902]
DAVIDSON: JOHN ADAM [*P.* 1905, *S.* 1906] (Londonderry).
DAVIS: CLAUDE WILLIAM [*P.* 1902, *S.* 1906] (Birmingham).
DICKMAN: HARRY ALDERMAN [*P.* 1904, *S.* 1906] (Nottingham).
DOUGLAS: ALEXANDER HOUSTON [*P.* 1901, *S.* 1905].
ELTON: PERCIE ION [*Special Examination*].
FINN: EDWIN [*P.* 1902, *S.* 1905] (Canterbury).
GOODCHILD: WILLIAM [*P.* 1904, *S.* 1906] (Ipswich).
GUTHRIE: LEONARD ROME [*Special Examination*].
HANSCOMB: CHARLES ERNEST [*P.* 1904, *S.* 1905].
HASTEWELL: ROBERT EDWIN [*P.* 1901, *S.* 1903] (Northumberland).
HAWKINS: FREDERICK GEORGE BRUDENELL-BRUCE [*P.* 1908, *S.* 1908].
HEPPEL: FRANCIS HENRY [*P.* 1903, *S.* 1907] (Worcester).
HOLLIS: HENRY CLIFFORD [*P.* 1902, *S.* 1903].
MAXWELL: WILLIAM CHARLES [*Special Examination*] (Belfast.)
MILBURN: WM., Jun. [*P.* 1902, *S.* 1908], *Saxon Snell Prizeman* 1908, *Godwin Bursar* 1910 (Sunderland).
MOBERLY: ARTHUR HAMILTON, B.A. Cantab. [*P.* 1907, *S.* 1908].
ORME: ROBERT WRIGHT. [*P.* 1902, *S.* 1904] (St. Anne's-on-the-Sea).
ORR: ROBERT [*P.* 1900, *S.* 1906, *Qualified* June 1909].
OSLER: FRANCIS [*S.* 1904].
PAGE: JAMES [*P.* 1899, *S.* 1908].
ROBERTS: WILLIAM JOHN, M.A. [*P.* 1908, *S.* 1908], *Ashpitel Prizeman* 1909 (Manchester).
ROWLEDGE: GEORGE HENRY [*P.* 1902, *S.* 1905] (Manchester).
SAGAR: WILLIAM HENRY [*P.* 1904, *S.* 1907].
SCOTT-WILLEY: HUGH HENRY [*P.* 1902, *S.* 1906].
STONE: GEORGE MARRISON [*P.* 1900, *S.* 1904].
STONEHOUSE: CHARLES [*P.* 1900, *S.* 1903] (Bolton).
TROUP: FRANCIS GORDON [*P.* 1907, *S.* 1909].
WARE: VIVIAN [*P.* 1902, *S.* 1906] (Bournemouth).
WOOLLATT: JOHN [*P.* 1904, *S.* 1905] (Nottingham).
WRIGHT: CECIL LAURENCE [*P.* 1898, *S.* 1905].

AS HON. ASSOCIATE.

DUNN: ARCHIBALD (Bournemouth).

The Secretary announced that by a resolution of the Council under By-law, the following gentlemen had ceased to be members of the Royal Institute—viz. George William Durrell, Charles Henry Hopson, Edmund Dealtry Pickford, and Frederick Stroats, all from the class of Associates.

Consideration of the Revised Regulations for the Conduct of Architectural Competitions adjourned from the Meeting of the 7th February having been resumed, the document was discussed and various suggestions for amendment were offered. Whereupon, on the motion of the Chairman, seconded by Mr. Frank Lishman [*A.*], it was

RESOLVED, that the revised Regulations for the Conduct of Architectural Competitions be referred back to the Competitions Committee, with a recommendation that they co-opt on to the Committee provincial members and others interested in the subject.

The proceedings closed and the Meeting separated at 10 p.m.

* Except where otherwise stated all the candidates passed the Qualifying Examination in November last.

THE BUSINESS SIDE OF ARCHITECTURE.

By Alfred Arthur Hudson [*A.*], Barrister-at-Law.

Read before the Royal Institute of British Architects, Monday, 14th March 1910.

IT is with great satisfaction that I find myself among members of my old profession. I well recollect my pupilage with the late Mr. Ewan Christian, and all the pleasant associations of those days are not easily forgotten.

In approaching the subject of this Paper, I am encouraged to say exactly what I think because I feel sure that the members of the Institute will take any suggestions I may make in good part. At the same time I have considerable hesitation in reading a Paper which may appear like criticism of the business qualifications of architects. Having, however, once been in practice as an architect myself, and having for twenty-five years acted as counsel in building and engineering cases, I am able to speak from two standpoints, and I can even speak from a third, for as building owner I have had occasion more than once to employ architects to build for me. From these standpoints I hope I may be permitted to bring to the notice of this Institute some matters which appear to me to require the careful attention of architects in general.

If I deal with the education of young architects I shall speak with less fear than I otherwise should do. Of late years the practice of taking pupils who have not had some previous training has, I am informed, more or less ceased, and pupils are required to go through a definite course of study in a school before they are admitted to an office as pupils. In many cases, I believe, pupilage has ceased altogether, the student going straight from his studies in the school into an architect's office as improver. In this position the architect who engages the improver does not owe the same duties to him as he would to a pupil. In fact, I doubt whether in most cases he is under any obligation to instruct the improver at all. It becomes merely a question of payment of the improver for services rendered, and the improver is permitted to pick up what information he can.

In this substituted practice it is obviously essential that as far as possible the training which the young architect would have had in an office should be taught in the school, and, besides this, that he should in some way have an opportunity of acquiring a knowledge of the general duties and practice of an architect which were open to him in the case of pupilage.

With a view to systematise and improve the education of young architects, a Board of Architectural Education was in 1904 constituted and empowered to draw up a scheme of architectural education. The Board consisted of members of the Royal Institute of British Architects and representatives of educational bodies, and in the result a scheme was drawn up by the Board and approved by the Council of this Institute.

The scope of the work of the Board, as the title would indicate, was to draw up a scheme of education in architecture, and the scheme was drawn up with that object. The Board expressly said that the course given in the schools should be limited to a thorough training in the groundwork of architecture; but they also said that a student should, besides attending an architectural course of two years in a school, follow this up by two years as pupil, improver, or assistant in an architect's office with supervision by the Board.

They recommended five subjects for the school:—(1) Building materials; (2) Construction; (3) Drawing; (4) Architectural form; and (5) Ancient architecture. Simultaneously with the course in the school, training in the workshop or laboratory was considered essential, with visits to buildings in course of erection. This course would undoubtedly, under efficient teaching, afford a young architect opportunities of learning the elements of drawing, the styles of architecture, the nature and properties of building materials and construction, and possibly better than he could have acquired the same knowledge as a pupil in an architect's office; but unless this training is supplemented by more practical training, as, for example, in planning, preparation of specifications, measuring and estimating, and unless it is followed by the pupilage recommended by the Board, or by some position in an office in which there is an obligation on the part of the architect to instruct him in the practical part of his profession, it seems obvious that the training would be very incomplete. I think perhaps it would be more correct to say that practical work should be supplemented by training in art and architecture. It must not be forgotten that as a pupil the student was in an atmosphere of practical work, and that his studies in architectural design were all made from the standpoint of practical work.

With the present system the pupil, if he started in practice, would have no business training in the matters to which I have referred, besides being entirely without experience in the performance of those many duties devolving upon a professional man, and especially those duties cast upon him under an ordinary building contract.

The Architectural Association have founded a School of Architecture, and I see from a statement in the prospectus, if I may so call it, that they say they agree in almost every particular with the recommendations of the Board. Looking at that course, there is everything suggested to give a student knowledge of architecture, of art, and even science, but nothing to fit him to put into practice that knowledge or to bring it on to a business footing, except some lectures in the last year.

The whole scheme, to my mind, is conceived with the idea that the architect must study architecture as an art, and that to be an artist in architecture it is necessary that he should be familiar with the materials with which he has to deal, in the same way as a painter must have knowledge of pigments; and following on the same lines, it follows that an architect must know about construction, otherwise the building he designed might tumble down; but anything in the shape of instruction as to the cost of building, or the relation of design to cost, or the application of art to practical work in everyday life, is missing; while the fact that a great number of young architects do not require high training in the art of architecture to make them useful members of their profession is left out of consideration. It must not be forgotten that in the days of pupilage a pupil could choose the kind of practice he wished to follow, and he could become a pupil of an ecclesiastical architect, or an architect whose work consisted of private houses, or warehouses, or any other class of buildings; but now, whether the student likes it or not, he must prepare to be an art architect and give up all other training for that one object.

The lectures at the evening classes, which continue over four years, do, however, but only in the fourth year, deal with some business matters. Then there is apparently one lecture for each subject.

There are ten lectures, and the subjects are, in short :—

1. The position, duties, and liabilities of client, architect, and builder.
2. The London Building Act 1894.
3. Dilapidations and light and air.
4. Contracts and agreements.
5. Specifications.
6. Approximate estimation of cost,

and four lectures on measurement and quantities.

These subjects are only a small part of what I should describe as the necessary education of an architect in the school, apart altogether from anything he may learn as a pupil after his term in the school has expired ; but in these there is no teaching—in the proper sense of the term. For example, what can a student learn from one lecture on the London Building Act or from one lecture on any of the other subjects ?

The first and foremost essential of all teaching is thoroughness, and it is especially so with a person studying to be an architect—a profession in which knowledge of detail and great foresight is of the first importance. No doubt the building owner in general would much prefer that the design of the building should be artistic ; but that is not the first consideration. I should have thought that it was hardly necessary to call attention to the fact that proper planning and a complete and well-thought-out specification of the work to be done, as well as an accurate forecast of the cost, besides other matters of this kind, are of primary importance. I notice that instruction in planning is suggested by the Board of Architectural Education, but I do not find it anywhere in the syllabus of subjects for instruction in the School of the Architectural Association.

As an example of one kind of planning, and of the thoroughness with which it should be taught, take, for instance, house-planning. In such a course the young architect, I think, should be instructed in the objects of planning under various heads, such as the comfort and requirements of the occupants (under this head would come the size and position of windows, the position of fireplaces and doors, the aspect of the house, and a variety of similar subjects) ; then there is the economic working of the management. Under this head the particular duties of the servants of a house, where a staff of two or more servants is kept, up to ten or twelve, would require careful instruction, as well as the proper servants' offices for each of these necessary requirements. How can anyone plan servants' quarters unless the exact duties of each servant are known ? Servants, if they are to be retained in their service, must have comfortable and suitably planned quarters, both for their work and for times of rest.

I think it will be conceded that the first essential in house-planning is good arrangement, and the second is design. A skilled knowledge of all kinds of subjects go to make up the qualifications necessary to design a comfortable house. May I tell a true story which came to my knowledge ? A gentleman of comfortable means, living in a house rented at over £100 a year, in which there was a wine-cellar, required alterations made. The plans, prepared by an architect, did away with the wine-cellar and made no other provision for storage of wine. When questioned by the client, the architect said that persons who live in houses of that class do not drink wine. This was a little disconcerting to the client, who was fond of his bottle of port.

Another matter for instruction, it seems to me, would be to teach the student how to make a well-designed exterior for a properly planned building. Although he may have studied ancient architecture, modelling, materials, and construction, these acquirements must be applied to practical subjects. The result of art education has no doubt produced a race of young draughtsmen of great ability ; but there seems to be a striving after eccentric features in buildings, without much regard to the comfort of the occupants. One sees a house set on the top of a hill with bedroom windows the whole width of the room, and therefore so large that there is no

warmth, while the lower floor of living rooms have windows so small that there is no light. The architect had in such cases no doubt attempted to apply some piece of architecture from a narrow continental street where light was wanted for the first floor, and the street being narrow air was not aggressive, while the lower floor was probably used as a cellar or a court with windows at the rear.

I would not venture to suggest all the elements of instruction in successful planning, but there is one branch which might, I think, give rise to much employment of young architects—if it were properly taught. I refer to the planning of sites for country houses and cottages, and in connection with this a knowledge of the laying-out of gardens. I believe that in old days architects considered this a part of their work. To my mind association with plants and gardens brings an architect to consider the design of the house from a quieter and more natural point of view. I think he would then desire that the first impression of the house he had designed upon a stranger should be not "What architect designed it?" but that it was essentially the residence of a gentleman in the best sense of the term—quiet, unassuming, natural.

In conjunction with these courses of instruction the student would also be taught the relative cost of the different methods of planning, and the increased cost due to various methods of architectural treatment of the exterior. These are only a few examples of what I should call business instruction in planning, but the same system would be adopted in buildings for all kinds of purposes. A student might take up any branch, or one or more branches, but everything should be taught upon defined data. In giving instruction as to the planning of hotels, for example, the proper data (having settled the number of guests to be provided for) would be the proper proportion of staff for guests, the right method of planning so as to reduce the staff to a minimum and yet enable the guests to be properly attended to. Perhaps it would be not too much to expect that the building owner should be consulted as to his requirements. May I give one of my experiences as a building owner? I wished to build a house at the seaside. The land directly overlooked the sea. The design submitted consisted of bay windows, gables, and some conceits in carved brickwork. I said that was not what I wanted, and I pointed out that the only view was in front, and therefore bay windows were useless except as enlargements of the rooms. I explained that I wanted a comfortable seaside house with wide verandas, where I could sit out in all weathers. The architect said his professional standing would be ruined if he designed such a house, and he refused to design it. The result was I paid for the designs and employed some one with less scruples. I may have been entirely wrong in expecting a modern architect to build what I wanted, and I suggested that as I paid the piper I might choose the tune; but I was told that was not so and it could not be done. I, however, built the house I wanted, found it very comfortable, and after living in it for some years sold it at a good profit.

I have not yet dealt with the question of cost, but one of the first matters with which an architect will have to deal when he confers with his employer is this question; so that, whatever his studies in styles of architecture may lead him to desire to carry out, he will have to make those ideas subservient to the question of cost. For this purpose he must be trained to measure and estimate, and he must learn the value of different materials. It is not necessary that he should know as much as a quantity surveyor, but there are many architects whose practice demands that they should be able to settle up builders' accounts. It falls to the lot of very few architects to find clients of unlimited means, and it is still more rare to find even such clients willing to disregard questions of cost.

Another example of equally necessary instruction, it seems to me, is the proper specifying of the materials and the various works which are required to be carried out. This is a matter in which very great foresight is required, besides a thorough knowledge of every kind of detail.

In the course of his instruction in the Architectural Association School, one lecture on the subject of specifications is given, and this only in the fourth year. I should have thought that one of the first essentials in the student's instruction would have been to teach him to accurately describe the various materials and methods of construction upon which he is receiving instruction during the course of his studies. It is not at all uncommon to find that a specification has been copied from an obsolete model describing materials which have long ceased to be sold or manufactured. It may be said that a knowledge of planning and the writing of specifications will be acquired during pupilage or as improver, but that argument I think would equally apply to the learning of architecture or any of the other subjects which is now taught in the school. My point is that everything should be taught in the schools which is capable of being taught there, that the practical side is just as important as the architectural or artistic side—and that both should be taught together.

But assuming that the student in some way or another has managed to pick up sufficient knowledge to make a plan and write a specification for the building to be carried out, the next question is—What does the student know about his duties to the building owner, the builder, the clerk of works, the quantity surveyor, and, I might add, his duties in connection with the employment of manufacturers of special articles required in modern building? The knowledge of these duties is quite as important as a knowledge of the styles of architecture, and much more important from the point of view of the employer, because upon a proper knowledge of these duties depends whether the building owner is to be protected from troubles from various quarters and possibly from litigation, or whether he will get the building he wants carried out in a reasonable time and manner, and at the estimated cost, or, at any rate, not much beyond it.

Again, it may be said that the student will gain the necessary information on these subjects during his pupilage. To some extent that would be true, and especially if he happened to be a pupil of a good architect and great interest were taken in the pupil; but when definite instruction can be given in the school I think it should be given there, while the putting into practice of what the student has learnt will, of course, depend upon pupilage. I understand, however, that the tendency is for students to become improvers (and not pupils), and in that form of service I doubt very much whether they obtain any satisfactory training in the business part of their profession.

It is well, perhaps, to call attention to the chief causes of litigation, because they afford a guide to the kind of business training necessary to avoid such troubles, to obtain for the architect the confidence of building owners and to enable him to get on in his profession. Disputes arise generally from :—

1. Misdescription in the specification and discrepancies in the drawings.
2. Under-estimating the cost of the works.
3. Unauthorised alterations and additions.
4. Failure to supply the builder with drawings and instructions when they are wanted.
5. Insufficient supervision.
6. The employment of specialists.
7. The supply of materials to the builder by the building owner, and from
8. The settlement of accounts.

Other disputes sometimes arise from the indecision of the architect and his failure to act according to the conditions of contract, and from many other causes.

The student might be given a course of instruction as to the meaning and effect of the various clauses in building contracts, the dangers or otherwise of their use or misuse, and instruction in particular upon the standard form of conditions of contract approved by the

R.I.B.A. I am afraid, however, that if he were carefully instructed as to the effect of those conditions he would inevitably come to the conclusion that in some respects he would be wise to alter them.

Contracts and conditions are sometimes prepared by the solicitor to the employer. In other cases some recognised form is used. The student, however, must be trained in his duties under known forms of conditions, because those conditions regulate the rights of the builder and the building owner and his own duties when employed as architect under the contract, and if in that capacity he fails in any part of his duties loss may be occasioned not only to the building owner but to himself. He may not get his fees, and besides may render himself liable to an action for damages.

It is essential that the architect should act in accordance with the conditions. They more or less define his duties, as I have said, and besides this the obligations of the builder and the building owner are regulated thereby. He should therefore know what they mean and how and in what manner they should be enforced. An architect may have his own set of conditions which he knows by heart and understands, but cases happen where alterations are made by the employer's solicitor, or where an entirely different set is supplied. In cases of this kind greater care is necessary.

In passing, I might say that with regard to the arbitration clause in the conditions of the R.I.B.A., it should be pointed out to the student that the provision therein that arbitration is not to take place until after the completion of the works is not desirable, and that this condition leaves the building owner at the mercy of any action at law the builder likes to bring during the progress of the works, because it is obvious that arbitration cannot then take place. I know of cases where the greatest trouble has been caused to the builder and the building owner owing to this provision. The object of the clause apparently is to accumulate disputes instead of disposing of them as they arise. That course may be a saving of trouble to the architect because he is not bothered with arbitration during the progress of the works, but it is highly detrimental to the interests of the building owner.

Further, it would appear to the student that in one clause of those conditions the works are to be completed to the reasonable satisfaction of the architect, while other clauses are ambiguously worded, if reasonable satisfaction is intended by the conditions generally.

These are two examples of the salient defects in these conditions, but many difficult puzzles of interpretation might be set for students. These conditions were, I believe, the result of an attempt to reconcile conflicting interests, and from that point of view there is much to be said for the attempt; but they are not at all satisfactory as a whole, though parts are very good. There should be no ambiguity in any properly drawn document.

I am afraid this is a digression, but whatever the criticism upon these or any other conditions may be, the student would by their study be taught to think and reason for himself instead of confining himself to drawing and modelling, and studies of ancient architecture.

Further, inasmuch as the young architect may under some contracts have to act as arbitrator as well as architect, he should be taught the principal duties of an arbitrator, and it should be pointed out to him how essential it is for him to act with the greatest fairness between the builder and the building owner during the course of the works in view of the judicial or quasi-judicial position in which he is placed under the contract. In such a position any incautious act on his part, very likely due to his want of knowledge of even general principles, may defeat the right of his employer to insist upon his acting as arbitrator. Questions of disqualification often arise from a desire of builders to try and get away from the decision of the architect, but they also arise from allegations of unreasonable and arbitrary acts on the part of the architect. I can only say that it becomes increasingly important, in view of recent decisions, that the scales

should be held very evenly, so as to avoid even the semblance of a charge of unreasonableness and much less of arbitrary conduct. There is even a business element in being fair and reasonable, for directly builders know that an architect knows his business and has the courage of his opinions and is determined to see fair play between builder and building owner, they tender with more certainty and often at less price.

A student should be taught the proper procedure in arbitrations, the giving of appointments for the hearing, and of peremptory appointments in certain cases. He should learn some of the rules as to the reception and rejection of evidence and as to the question of costs. At any rate he should have sufficient general information on the subject to enable him to know when he is getting out of his depth and when it is desirable to call in legal assistance. One elementary rule should be impressed upon the young arbitrator, and that is that he should at a very early stage of the arbitration either ask for a cheque on account or for a joint undertaking from the solicitors (representing the parties before him) to take up his award and pay his fees. If he goes on with the arbitration without any arrangement as to payment, he may find himself in this position, that when he asks for payment he is refused.

In that state of affairs, if he does not go on, probably he will never be able to recover payment for all the work he has done, and if he goes on he may be in no better position. One case came to my knowledge where the arbitrator had sat for one hundred days, and there seemed no prospect of finishing under another seventy days. In these circumstances both parties refused to pay him anything, and one party threatened that if he did not go on he would sue him for not completing his duties.

Dealing with this question of arbitration, apart from the question of students, it seems to me that this Institute occupies a very important position in the selection of arbitrators in building disputes. This position might, I think, be greatly strengthened by additional care being taken to ascertain the class of dispute for which the appointment of an arbitrator is asked, so that a suitable arbitrator may be appointed. By suitable arbitrator I mean that as disputes vary a great deal some selection on that account should be made. If the dispute is about accounts, figures and prices, an architect with such knowledge would probably be the kind of arbitrator to select; while if, on the other hand, the claim was for damages for delay and interference, then perhaps an architect with broader knowledge would be desirable. I would suggest that an instructional paper should be issued inviting builders and building owners to assist the Institute in the selection of arbitrators, by stating, when applying for the appointment of an arbitrator, the class of dispute in question for which an arbitrator is desired. It is also desirable that the names of the parties and the architect under the contract should at the same time be supplied, so that an arbitrator may be selected who has no interest in the persons disputing or the subject matter of the dispute. Except in urgent cases the Secretary might send to the applicant a form to be filled up with these particulars.

I may be permitted to call attention to another matter of some importance in connection with arbitrations. When an arbitrator is appointed, whether by this or some other method, it should be remembered that lawyers expect that the arbitration should be conducted in the same manner and decisions given on the same principles as they are in the High Court. I have heard it said by solicitors on many occasions that they would not go before a technical arbitrator under any consideration, and one of the chief reasons they have given is that they never know what such an arbitrator is going to do about costs. It is much to be regretted that such objections should be possible, because there are obviously many advantages in trying a case before an arbitrator with technical knowledge.

In the High Court, if a party wins he is entitled to his costs, unless the judge in the exercise of a proper discretion deprives him of them. In effect, however, whoever wins gets the costs.

Sometimes there are issues on which one or other party has lost, and then he may be properly deprived of the costs of those issues on which he has failed. This is what a lawyer expects, but when costs are awarded without any regard to these principles the lawyer is naturally prejudiced against this kind of arbitration. In matters like the proper awarding of costs I feel sure that by far the better and safer plan for architects is to take legal advice and act upon it.

Coming back to the question of students, I think a short course of instruction might also be given to them on their duties with regard to the employment of specialists—I refer to merchants who supply some special material or manufacture, or do some special class of work—because the proper fitting and furnishing of modern buildings depend a great deal upon the goods which these persons supply and the work they do. The employment of specialists, however, gives rise to constant litigation, and difficulties and disputes arise from many causes. The chief cause is a defective contract, but another and almost equally important cause is the unbusiness-like and uncertain arrangements made with them by the architect and the delays and hindrances caused to contractors in consequence.

The complications which arise from dealings between the architect and specialists are sometimes extraordinary and arise in other ways than from delay. The specialist generally tries to make some one other than the builder responsible, because the builder has either no money or has become bankrupt. There is often ample material for him to attempt this and even succeed owing to the manner in which his goods were ordered.

The facts may then give rise to one or other of these propositions: (1) that the architect ordered the goods himself and is personally liable, or (2) that he ordered the goods as agent for the building owner and that he is liable. On the other hand it may be contended that the builder himself ordered the goods as agent for the building owner. These and many other matters might well form the subject of business training in the school.

May I give another illustration of the necessity of business training of architects? One would have thought that an architect in practice and carrying out works of great artistic merit and at considerable cost would know that it was his duty to make up his mind whether work done by the contractor was to his approval or not; but I have known cases where an architect said in effect to his employer, when complaints have been made to him of work improperly executed by the contractor, "I have not given any decision; wait until the building is finished"; and the building owner has waited until he was even in the building, and still he was told to wait. The result was naturally litigation.

A small subject of instruction might be the duties of the clerk of works. The student should have explained to him the proper limit of authority of the clerk of works as to the passing of work and materials. The necessity for the clerk of works to keep proper diaries and records, &c., and to make periodical reports should also be pointed out to him; while the liability of the architect for the acts of the clerk of works might also be dealt with.

I might give one more illustration of the necessity for instruction. It is not uncommon to find that corporations in particular, and other employers as well, think that money can be saved by purchasing themselves some of the materials to be used by the contractor in the construction of the building or works, as the case may be; but it almost invariably happens that such materials are delivered too soon, and therefore are in the contractor's way, or are delivered in the wrong place or too late, causing hindrance and delay, with the result that any saving which the employer may have effected on the purchase is swallowed up by a large claim for damages made by the contractor for the interference and delay caused to him in the execution of the works by the non-supply of these materials at the proper time and place. The duty of architects is to advise employers in such matters, and if nevertheless materials are to be supplied in this way, to advise proper conditions for their supply, so as to limit the damages in case of their non-supply.

I would advise that the instruction in the school should be divided into two parts, the business side and the art side, that no student should be allowed to join the art side unless he joined the business side, and that both branches of study should go on together and that no student should be properly qualified as an architect unless he had passed an examination in the business side.

But with all this instruction in the school, in which it would be possible to train the student very highly, it must not be forgotten that the young architect, unless he spends a proper time as a pupil, will by this change of training lose those great advantages (which he had as a pupil) of the close association with a master often of very high character and great ability. As a pupil the young architect saw how his master dealt with delicate and difficult questions from day to day, and he learnt, if he was fortunate to be a pupil of such a master as I have described, the duty above everything to hold the scales evenly between employer and contractor, and to perform those many duties devolving upon him with a high sense of the honour of his profession.

The profession of an architect or engineer differs from other professions, especially on account of the quasi-judicial or judicial duties he has to perform in addition to all his other duties. Scarcely a day passes but some matter is brought up for his fair and impartial decision; and these duties become more difficult every day owing to the keenness of competition.

In the case of architects, inasmuch as their profession is closely allied to art, there is the additional difficulty in finding the true artist imbued with business habits and qualifications; but when these qualities are combined the possessor of them is found amongst the leaders of his profession. In some cases a happy combination of a business man and an art architect in partnership has produced equally good results; but having regard to the natural difficulties in finding a combination of such qualities, a course of instruction to students which accentuates them cannot, in my opinion, be good.

The Royal Institute of British Architects and the Architectural Association have in the past few years done a great work in the education of young architects, and, as a result, one cannot help noticing the wonderfully improved design of many modern buildings as compared with those of twenty or twenty-five years ago; but there is a danger which I have endeavoured to point out that in the study of art, ancient architecture, modelling, painting, and so on, the business qualifications may be overlooked, and that in the school the student may never have the opportunity which he had as a pupil of learning how to uphold the honour of his profession.

There is one other suggestion I should like to make, because if students are to have sufficient time to study art and architecture an effort should be made to assist them in the study of practical work. To that end and also for the purpose of simplifying the practical work of architects in general, I think that much might be done by standardisation.

Much has been accomplished by the Engineering Standards Committee, and I see no reason why an Architectural Standards Committee should not be formed. The object of the Committee would be to put the specification for the ordinary requirement of every-day practice in building into standard form, and to keep these forms up to date by periodical meetings. In the preparation of these forms the work of the Engineering Committee could be made use of, in so far as it applied to building work. For example, an elaborate specification for the testing of cement is now unnecessary. A clause in the specification that the cement is to comply with the tests and requirements of the Engineering Standards Committee is sufficient to provide for cement of the best possible quality. The work of the Committee might later be extended to standardising details of various work in respect of which the considerations of art do not enter.

This Committee would be supported by sub-committees consisting of representatives of local and government departments, and technical societies, contractors, merchants and surveyors, as well as architects. Representatives from the London County Council, the central

building authority of London, could materially assist the work of the various committees as regards building work in London.

In conclusion I hope I have said nothing to offend anyone. For myself, I can only say that I am full of goodwill for the members of my old profession, and that it will always give me the greatest pleasure if I can be of any service in advancing the objects of this institution.

NOTE.—Since writing this Paper I have had the opportunity, at Mr. Maule's invitation, of going over the school which he has charge of at Westminster. I should not like it to be thought that anything I have said in my Paper reflected upon the work performed by the students there and the instruction given so far as it goes. I was most impressed with the thoroughness of the teaching in drawing and in the styles of architecture and in the details of the architectural work; in fact, I do not think it would be possible to train students better than they are trained there in the various subjects to which I have referred. After carefully looking through the course of instruction given at the Architectural Association school, I could come to no other conclusion than this, that if practical work is to be taught as well as architecture and art there must be an extended course of study. It is impossible to do it in two years. That was the impression I formed from an inspection of the excellent work done by the students in that school and from the course of instruction given to them.

DISCUSSION OF MR. HUDSON'S PAPER.

MR. ERNEST GEORGE, A.R.A., *President*, in the Chair.

Mr. EDWIN T. HALL [*F.*]: In rising to propose a vote of thanks to Mr. Hudson for his most interesting paper, I am sure members would wish me to express our appreciation of his great kindness. He is a barrister of considerable eminence, and one of the members of the Tribunal of Appeal under the London Building Act, so that in addition to his knowledge as a barrister he has the judicial qualities which enable him to deal with matters intimately associated with our profession; therefore anything which he says to us is of very great value. I am sure we shall appreciate the fairness with which he dealt with our shortcomings. He has also pointed out some features of value in the training of an architect. To all of us the art side of our profession is the most fascinating, and if we sought our own pleasure we should devote the bulk of our time to it. But we have duties to perform to our clients which, if not sometimes of the most pleasurable, may, if we throw our soul into them, become so interesting that the inconvenience and unpleasantness associated with them disappear, because we are sensible of an endeavour to master a difficult and troublesome subject. Mr. Hudson has pointed out the great desirability of a student studying the writing of specifications and the studying of quantities. I believe that in the studying of quantities we are doing a most useful work, though we may never practise as quantity surveyors. In my young days I made a point of learning how to take out quantities, and I have found it of inestimable value because, even in such matters as designing stone work, the fact that you have taken out the quantities for stone teaches you about beds and about joints and about the economical use of material, the knowledge of which is of great value in the disposition of the design and in the consideration of one's clients' pockets. I would strongly recommend architects to write their own specifications. If you write your own specifications and have a knowledge of quantities you will know more about your building than your contractor, your foreman, or your clerk of the works, and can go on the building and give a prompt decision on a subject which otherwise would bother you immensely. If, again, you practise the writing of a specification you acquire a literary style, because you have to express yourself clearly and tersely, and if you can do that you will find the literary effort a pleasure in itself. Furthermore, even if your drawings are finished you will constantly find that you can amend and improve them, and consequently better your building. Mr. Hudson has also drawn attention to the important question of estimating cost. Probably you have read a very able lecture given by Lord Cromer at Oxford University some time ago, when he said that every question of high policy, every question of liberty, every question that related to politics at all, resolved itself from a basis of finance. I think Mr. Hudson is right in saying that the cost of a building is a very important matter, and

whatever we design it is all governed and ruled and brought down to the basis of the cost of carrying it out. Mr. Hudson points out, too, that foresight and the knowledge of detail are of great importance. That foresight is only gained by writing your specification, and trying to imagine all the difficulties you will have to contend with in your building. The practice of that writing will increase your power of foresight, and will save you large bills of extras at the end of your contract. Mr. Hudson has mentioned that an architect should plan his building, and design the exterior to suit that plan. My brother architects will agree that when you a replanning a building, *pari passu* the design of the elevation is growing in your mind—that when you are experienced you cannot design one without the other. In my young days there used to be a practice of designing an elevation first and making the plan to fit it. That is an outrageous thing to do, yet it was a common practice forty or fifty years ago. The proper course is to design your building from the plan, and the elevations grow up while you are designing it. Mr. Hudson, again, drew our attention to the dangers of making draughtsmanship the be-all and end-all of our existence. Draughtsmanship is good, but draughtsmanship is not architecture. I have seen the architect's design for the York Gate, and his working drawing, and eminent as he was he would have been plucked at any of our schools. Mr. Maule would not have looked at him; he would have said the man was incompetent altogether; and yet he turned out very good work. I feel sometimes there is a grave tendency in the present day to make draughtsmanship take too large a place in architecture. Mr. Hudson drew our attention to the architect who put too much glass in the upper windows. Lord Bacon in one of his essays says: "I shall show you a building where there is so much glass in the windows that there is not a sheltered corner in the room." And Mr. Hudson has felt that same inconvenience. It is a difficulty, but it arose very largely in the early days with the moving away from the old-fashioned castle. In the Elizabethan time windows were of very large extent, possibly the reaction from the close and narrow windows of the old castles. I am not sure also that the abolition of the window taxes did not result in a reaction. The sun is the great germ destroyer, and if you have a big window admitting plenty of sunlight you can at all events be certain that your room will be a healthy one, even if it seems rather cold. We all appreciate the suggestion that the design for a house should be quiet, unassuming, and natural. One architect friend of mine says he always tries to design a house so that it should not appear that an architect had designed it, but that it had grown out of its site. I believe that is a perfectly sound rule for us all to follow. Mr. Hudson has drawn our attention to the architect's duty to the client, the contractor, and the clerk of works, and has laid great stress upon the necessity for reasonableness and equity. The architect who boasts that he is the master of his work and keeps the builder under his thumb is making a very wild boast. If he can instead say that he is so reasonable and equitable in the treatment of his builder that the builder is his friend and is anxious to carry out his work, to give him delight, it is a much happier condition for him to be in. If you have your builder at loggerheads with you, you will never get the same results as if he were in sympathy with you. That does not imply weakness in the architect, but rather strength. If the builder knows that you have a mind of your own, that you know what you want and have thought it out, he will not try to play tricks with you at all; and if he finds that one of his servants has done what is improper, and you condemn it, he will not resent but will respect your action. One point that Mr. Hudson could help us in is this. An architect undertakes to supervise his building, but the law is not clear as to what supervision means. I think it a very iniquitous thing that an architect should be held responsible for something done not only without his knowledge but contrary to the specification, and should be held responsible if he does not see it. No architect can live for twenty-four hours on his building, and if a thing is done in his absence which he does not see, it is not reasonable that he should be held by the Courts responsible for it. One thing that many architects get into trouble about with their clients is that they do not keep their clients regularly informed as to any variations which become necessary. If they did they would save all kinds of litigation and heartburnings at the end. If you inform your client of the variation he has knowledge, and unless he objects to it then he acquiesces by silence and cannot reproach you for it afterwards. Otherwise it is questionable whether you can make any variation from a specification without the knowledge of your client. I know of one very large building, costing £100,000, where 7 lb. lead was specified for covering the roof. The contractor put in 6 lb. by mistake, and, for the purpose of my argument, it was an honest mistake. The architect thought the 6 lb. would do, and took credit for the difference in value, but at the end the clients discovered this change. They brought an action, and the architect, I believe, was held responsible because he had permitted the change without the knowledge and consent of his clients, notwithstanding that they had not paid for the omitted material. It is very wise to tell us all to act in accordance with our conditions. Many architects do not. As an arbitrator I have constantly discovered that. They have conditions, and yet they seem to think they can work their own sweet will and ignore them. If you do so you are rendering yourselves liable to an action by your client, and if he is a litigious man

it will be a costly business. With regard to the arbitration "at the end of the contract," I remember when the conditions of contract were settled there was a very great divergence of opinion about that. Architects generally held that it was desirable that any questions of dispute should wait until the end, and then be adjudicated upon, because it was said that if you got hold of a litigious contractor, by pin-pricking and insisting every week on something going to arbitration, he would break your heart; and that is why the clause was put in. It has its inconveniences, but with any reasonable contractor you can get out of it, because the clause provides that this arbitration shall wait until the end, except by consent. If either party wanted to be litigious no consent would be obtained, but with any reasonable contractor and architect if a difficulty arises you can have an arbitration at any time. Those conditions were the result of a very great fight between the builders and the architects. The architects could not get all they wanted, the builders tried to get a good deal more than the architects thought right, and therefore the provisions, like those of all documents settled between parties, were more or less in the nature of compromises. With regard to the "reasonable" satisfaction that Mr. Hudson spoke of, I think the first clause of our Conditions says the work must be done to the reasonable satisfaction of the architect, and generally I think that word is used with regard to anything as to which there may be an arbitration. But where there are certain clauses on which there can be no arbitration, where the architect is sole master, I think, speaking broadly, it means it must be to the absolute and not to the reasonable satisfaction of the architect, because he is sole judge, and that is possibly why those words arose. But whether right or wrong, they were settled by two eminent counsel at the time. As to the final certificate, Mr. Hudson thinks that an architect ought to make up his mind and say when a building is done to his satisfaction. He will forgive me if I say that I think it is a most dangerous thing for an architect at any time to give a certificate that buildings have been completed to his satisfaction. If he does, he immediately relieves the contractor from liability for anything he may have improperly done, and takes it upon himself; and with great respect to Mr. Hudson, I hope none of us will ever adopt that practice. I know of a case at the present moment where a clause was so drawn. It said the architect should at the completion of the works give a certificate that the buildings had been done to his satisfaction, and that that should release the contractor from any further liability. What has transpired since then? It has been discovered that the contractor has done something quite contrary to the specification, of which the architect knew nothing whatever, and of which I think, having looked into it, he reasonably knew nothing, and the clients have made the architect pay £2,000 for remedying work the cost of which under our clause would have fallen upon the builder. We do not give a certificate that it is to our satisfaction, which means that if anything wrong is discovered within the period of the Statute of Limitations the contractor should retain the liability. In this case the clients were quite friendly to the architect, and would have brought an action against the builder if they had not been barred by the clause as to the architect's final certificate. As to the duties of an arbitrator, there again Mr. Hudson has advised us how careful we should be to be strictly equitable and follow as far as we possibly can the practice of the Courts. The question of costs is one we shall all reflect upon, because many architects do not know how they ought to award costs. They think they may give an award in favour of a man, but sentimentally they give the costs to the other side. It is perfectly wrong; you must have no sentiment; you are a judge, and you must deal with what is right within the terms of the contract. Then with regard to our fees, that is a thing which touches us home, and the advice to get some security for our fees is most valuable. I knew a case lately where an action was brought by a builder. It was a factitious and improper one altogether, but it was not so discovered until the arbitrator had sat about twenty days. Then everybody knew the builder was going to lose. It was not in the interests of the other side to take up the award, so the arbitrator was in this ridiculous position: he believed the builder was going bankrupt and he knew therefore he could never get his fees out of him. The other side would not take up the award, so he tried to stop the arbitration, but they compelled him to go on because he had entered into an implied contract to decide the case. I am delighted to hear that we can get anything like security for the payment of our fees. As to the form which Mr. Hudson has suggested, a form which should be filled up so that we should know the nature of the arbitration and the arbitrator would have something to guide him in dealing with it—that is a very good suggestion. With regard to the question of specialists, that is a fruitful source of litigation and arbitration. Many an architect takes an estimate from a specialist and orders the work, whereas under his conditions he has no power to order at all. If he does get an estimate, the form of the conditions is that he should simply nominate and the contractor should give the order for the goods. If architects neglect that, they are rendering themselves liable for an action which the specialist can bring against them, and would probably win. The last suggestion with regard to standardisation is quite worthy of our consideration, and I am sure it will be considered; but it is very difficult to standardise in architecture. I have had the honour of being a member of the Standardisation Committee of the Institution of Civil Engineers, and they

can standardise all kinds of engineering things and all kinds of things which pertain to architects' work, such as soil pipes, rain-water pipes, hot-water pipes, &c., but it is very difficult to standardise many other things which are used. I do not see how you can standardise timber; I do not see how you can standardise bricks. The standard for the South of England differs from that of the North even as to bricks; so that, though it is a matter which is worthy of consideration, it is much more difficult in architectural work than in engineering work. I wish to conclude by moving a most hearty vote of thanks to Mr. Hudson for the valuable Paper he has given us.

MR. JOHN SLATER [*F.*]: It must be a pleasure to everyone to have Mr. Hudson with us to-night, for on many points connected with building he is undoubtedly a past master. If there is anything connected with building legislation and arbitration which Mr. Hudson does not know I do not think it is worth knowing. I cannot help thinking, however, that the lapse of twenty-five or thirty years since he was in an architect's office has thrown a certain amount of glamour over his pupil days. He says that if a young architect studies in a school only, and does not get his training supplemented by practical training in specifications and estimating, &c., he will not be much good. I am afraid the experience of many of us in our pupil days is that the average youth did not as a pupil get this instruction. He was rather given to be told to make tracings and that sort of thing, and the teaching he got was of a kind that certainly did not go very far to train him for the practical work of his after-life. Mr. Hudson has said that the scheme of the Board of Architectural Education gave an idea that the architect must study architecture as an art. That was not the view of the Board of Architectural Education, because the Board felt that practical work was the main thing that architects should be taught in a school. When Mr. Hudson criticises, as he legitimately does, the fact that at the Architectural Association there are only ten lectures on what are called the practical politics of architecture, such as our duties and liabilities to clients, &c., I am very doubtful whether it is possible that such matters as these can be learned by a pupil in a school, or can be taught in the school at all; they are so very much a matter of practical experience. I agree with Mr. Hudson when he asks: "What can a student learn from one lecture on the London Building Act?" Why, we have been practising under it for many years, and have not learnt it yet. The pupils of a school have in the main come from school or college, and are just beginning their work. And this fact it is which proves to me that for the first two years in the school the subjects for study both at the Architectural Association and at the various colleges over the country are mainly those elementary matters which can be taught to the young student, and that it should be left to him afterwards in an office to get the further experience which he requires. Mr. Hudson is perfectly right in saying that planning is a matter which should be taught an architect, and I think the drawing which is done in the Architectural Association schools and in various other places should include the planning of a building. I do not think Mr. Maule or any of the other teachers simply give students things to draw without giving them an idea of the plan upon which they are to draw. Mr. Hudson says, very truly, that the young architect should know what the duties of the servants of a house are, and all that sort of thing. That is perfectly true; but it is quite impossible in a school with a two-years' course to give instruction on all kinds of buildings: you have not the time to do it. Mr. Hudson has touched upon the subject of arbitration. There, again, I do not think it is possible to teach young students in a school the various data and facts which relate to arbitrations. The probability is that before he becomes an arbitrator he will have had to give evidence on behalf of his client, or on behalf of the person for whom he is acting, in courts of law, and it is only the experience which he gains in giving such evidence that can teach him the duties of an arbitrator and the rules of court. It is true that an architect when he begins practice ought to know these things; but I see that there are very great difficulties, if not impossibilities, in teaching these matters to a very young architect. I remember in one of the first cases I was ever engaged in to give evidence I was given a piece of advice by an old Q.C. which I have never forgotten, and which I think is the very best piece of advice which can be given: "More cases are lost," he said, "by trying to make them better than they are than in any other way." I have never forgotten that, and I am sure from the experience which I have had of recent years in arbitrations that that is so. If I may venture to give a piece of advice to an architect who is concerned in one of his earliest arbitrations, I would advise him by no means to give any reason for the decision at which he arrives. I remember being an arbitrator in a building dispute. The builder claimed a very considerable amount of money, and I gave him not anything like half what he asked. After the award had been taken up the builder's solicitor came to me and said: "My client has asked me to see you; we have not the slightest intention of disputing your award, but my client thinks he has been very grossly deceived; will you give him the reasons and the data upon which you made your award?" I looked at the solicitor, and I said: "Do you think I shall?" And he said: "No, I do not." It is a very bad thing to give your reasons. With regard to the advice to take care to get something on account if we have an arbitration, I remember one case in which a very distinguished President of this Institute many years ago was appointed arbitrator.

They sat at the Westminster Palace Hotel, and on the first day the arbitrator said to the counsel and solicitors: "I have ordered some luncheon; I think you had better come and lunch with me and I can put the fees down in my award." They did that for a great many days, and the fees went on increasing. When the arbitrator made his award he wrote to both the parties and said the award was ready. It was some building dispute, and the building owner said: "We have £400 or £500 to pay in costs on this award. Cannot we settle it and not take up the award at all?" And they did, and the poor architect never got, not only his own fees, but what he had expended in dinners and lunches for the others. I endorse the advice which Mr. Hudson gives when he says that the architect ought to make up his mind whether the work done by the contractor is to his approval or not. It is an extremely bad thing, and within my personal knowledge has given rise to a great many very awkward disputes, if when the building owner says, "This is not right," the arbitrator simply says, "Wait till I have given my decision." If an architect finds he has work to complain of, he ought to complain at once and try to get it set right and not wait till the end of the job. I am sure Mr. Hudson will not think I have criticised his Paper unduly, and I can say as a personal friend what great pleasure it has given me to hear him read the Paper, and I should like very heartily to second the vote of thanks.

Mr. WM. WOODWARD [*F.*]: I know of nobody so well able as Mr. Hudson to discourse upon the subject of the Paper, and with every word which has been uttered by Mr. Hall and Mr. Slater I most heartily agree. Mr. Hall has so splendidly criticised the Paper that I do not intend to traverse it minutely. But there are one or two thoughts which I should like to mention. First, I disagree with Mr. Hudson as regards standardisation. I agree with Mr. Hall that standardisation in architecture is not desirable. With regard to arbitration, I think it is clause 16 which gives absolute power to the architect with regard to materials and workmanship. If these Conditions of Contract are revised, I think that clause, although I was a party to it, should be somewhat modified. There is a case before me at this moment where I feel sure that the architect in rejecting materials rejected them because of want of knowledge of their quality. I am satisfied those materials were of the very best quality possible, and I know in one particular instance the architect ultimately approved of bricks which cost the contractor 3*s.* 6*d.* to 4*s.* per thousand less than those he had rejected. I think, although the clause is an absolute one, there should be some appeal from a decision of that sort. The arbitrator would be bound under that clause to give his decision in favour of the architect. In regard to sub-contractors, that is a pitfall I would recommend every young architect to avoid. The longer I live, the more I feel convinced that the fewer sub-contractors on a job the better for everybody. The sub-contractors are becoming a nuisance to the builder, and ultimately, I am sure, many of them become a nuisance to the architect. I think the builder should have more complete control over his building than he now has, and I think the less we indulge in appointing sub-contractors the better. With regard to quantities and specifications, with every word Mr. Hall has uttered I agree. To the young architect, whether an art architect or not, a knowledge of quantities and of the leading prices will be of the utmost value; it need not interfere with his art instincts or his desire for the finest artistic production. If he has a knowledge of prices and the ability to write a specification, he is master of the building when he comes on the job. I recommend every student to read carefully the list of points in Mr. Hudson's paper upon which litigation may arise. He will find that mixed up with those points are matters which he should endeavour to consider, particularly with regard to extras. It is so very easy for an architect to allow addition after addition to run up and never to apprise his client, and then there is an inevitable quarrel with the client at the end. I quite admit that it is a trouble to keep writing letters with regard to small additions, but the accumulation of these trifles leads to vexation at the end. I support very heartily the vote of thanks for this excellent Paper, which is brimming over with information as the result of the experience not only of an architect but of a very successful barrister.

Mr. W. H. ATKIN BERRY [*F.*]: The remarks I had intended to make have been very ably covered by the previous speakers and there is very little for me to add. In the Paper and discussion I have been reminded of an occasion many years ago when a discussion on very much the same lines took place in this room, a question as to whether the art or the business of our work should receive the greater consideration. I remember Professor Aitchison making a remark to this effect: "If I want to select a baker, I do not ask the candidates what they know of the ancient history of bread-making or whether they know the name of Pharaoh's chief baker. I ask 'Can you make bread?' and it is upon the answer that I should make my selection. In the same way I think we may spend too much time in considering past history and past architects. I should rather ask the young architect of to-day if he knows his business, and upon that I should judge whether he was fit to practise or not." Mr. Hudson spoke of standardisation. I view with some terror this increase of the idea of standardisation. It seems to me if we are not careful it will crush out all individuality. There will be nothing left for the individual to originate. The architect will become a sort of standardised sausage-machine

a receptacle into which all the ingredients for a building are to be poured, the instructions of the employer, the Building Acts, the by-laws, the General Powers Bill, and all sorts of regulations, and then a few turns of the handle and there is your standardised building, complete in every respect, and to the entire dissatisfaction of everybody. I should like to join in the vote of thanks to Mr. Hudson for his very able Paper and kindly remarks. He has given us much to think about, and much which is well worthy of our attention, and he has given it upon very good authority.

MR. H. P. G. MAULE [*F.*]: Mr. Hudson has mentioned the school over which I have control, and I should like to make some reply. My excuse must be that for many years now I have had to do with architectural education, and for the past seven I have had the conduct and control of one of the largest schools in the kingdom. There are two things which have been borne in upon me during that time more than any other. One is, the immense scope of an architect's calling, the amount of ground he has to cover, the multiplicity of things he has to know. The second is the great danger of overcrowding the curriculum, of giving confusion instead of education. The simpler you can keep your curriculum—I was going to say the more you can keep out of your curriculum—the better, because there are two ways of looking at education. One is that it is a sort of cramming-box wherein the student has to do little but to sit quiet and be stuffed. That, I think, we shall agree is an absolutely wrong view. The other view is to try to train the student in the limited time you have at your disposal, limited compared with his whole life, which will be a training right through. That education, I think, should be largely devoted to training him to train himself; to teach him the principles that he may apply in detail from his own knowledge. To take a case in point, Mr. Hudson has referred to the one lecture on the Building Act. Anybody with the most limited acquaintance with the Building Act would know that that could be in no sense all the education required for the Building Act; but it might be a lesson in principle whereby you can help the student to tackle that Act with some little knowledge, so that he can with time and experience overcome its many difficulties. So far from putting these things into the curriculum, I think Mr. Hudson's Paper rather goes to show that they should be kept out, and I cordially agree with what Mr. Slater said—that the office is the place to learn these many points of practical experience. Again, Mr. Hudson is wrong in assuming that pupilage under an architect no longer enters into the training. Quite 98 per cent. of our students leave us and go into training as pupils. Their two years' training with us is only preliminary. Mr. Hudson, I think, has, in the first place, written his Paper from a study of the curriculum instead of a study of the actual work which is being done. Had he paid that visit, for which I thank him, first, I think he would not have referred to so many of these things as the work of the student, but as rather the work of the architect when just emerging from his early studentship. There is a great deal of talk about architectural education, but comparatively few of us have actually had the handling of students. There are a great many things which theoretically it is desirable the students should know; but the more one has to do with them, the more one has to teach, the more one feels how exceedingly dangerous it is to go too fast. Mr. Hudson refers to the teaching of the specification. Many years ago I remember Mr. Hall giving me a very valuable piece of advice. He said: "Always write your own specification, and if you are in doubt about anything, sketch it first and then write the description." I should be afraid to say how many times I have repeated that advice in the school, and how many times I have insisted upon the fact that if a man knows what he is doing he will have no difficulty in expressing himself, provided he has been trained in expressing himself. In the first year of the day school not only do the students write out a small specification of the work they have been doing, but they are trained constantly, almost every week, in writing about the work they are actually doing. They write descriptions of the visits they make to buildings, and they are constantly, every week, made to write and illustrate various points in regard to their work. If a student has a fairly solid knowledge of his materials, and of the workmanship by which those materials are put together, I venture to think, when the time comes, he will have no difficulty in writing the necessary specification. If he knows his job he will be able to describe it. There are various things in the Paper which relate particularly to the school which Mr. Hudson would hardly have said had he had a little more first-hand knowledge, but their importance cannot be too strongly insisted upon. I think if the Paper shows one thing more than another it shows that we should not be content with the very limited amount of architectural education which is at present available. There must be many men who would be willing and anxious to avail themselves of a higher architectural education were it available. I hope that when that education is forthcoming, as I have no doubt it will be in the future, it will not merely devote itself to grandiose design, but will include many of those important points which we ourselves must have had to face without any real instruction. No matter how good the student's office may be, no matter how his master may devote himself to him, it is impossible for him to cover all the ground which he will meet when he gets into practice; but if he has some further opportunity of gaining knowledge on the lines which Mr. Hudson has sketched I feel

it would be an advantage. I express my thanks to Mr. Hudson not only for his Paper, but for the very kind things he has said about the Architectural School, and to assure him that I have not been in practice over fifteen years without learning some of its pitfalls, and it has been my endeavour from the very first to teach students that they must not merely be draughtsmen, but must be upright, honourable men of business if they are to conduct their work in the way we all wish it to be conducted.

MR. MAX CLARKE [*F.*]: I should like to support the vote of thanks and also to support Mr. Hudson in his view with regard to standardisation more particularly. We have heard that bricks cannot be standardised, although the Institute have got a standard for them; but we have not been told that architects do not take the trouble to write in their specifications, when they use various sorts of bricks, that they should work in with each other. About fifty per cent. of architects, according to the specifications which I have seen, do not trouble to do that. The Science Committee at the present time are trying to get some information as to a standard quality for paint, and in trying to do so they have arrived at the conclusion that the subject is in a state of almost unutterable confusion. It is perfectly well known that fifty per cent. of the paint now used is hardly worthy to bear the name at all. The difficulty begins to assert itself when you try to standardise. I have brought before the Science Committee the desirability of standardising a specification for timber. I heard a few minutes ago that it was impossible. Fifty per cent. of the specifications for timber at the present time are specifications for timber which cannot be obtained on the market. It is all perfectly right if you can get it; but you cannot: it is not imported into this country. I do not care what you call it, whether standardisation or anything else; but put before, not only the students, but the members of this Institute, a description of the materials which are imported into this country and where and how they can be got, and then leave the man with a certain amount of knowledge to use that information. At the present time it is absolutely correct, as Mr. Hudson says, that the specifications contain clauses which are copied and copied from generation to generation, and some of the things specified are actually not obtainable. The same thing occurs in specifications with regard to plastering. I read this morning a specification sent to me on account of a dispute in a building matter, and the specification about the plastering said nothing which could be formed into common sense, good, bad, or indifferent, except that it was sand and plaster of some kind or another. There should be some sort of indication as to whether when you use Parian cement the contractors should be allowed to use sand with it or not, and whether they should be allowed to put it on a Portland cement backing or not. These are things which architects in practice do not put into their specifications. If these matters were brought before students, and before practising architects—whether under the name of standardisation or any other title—it would be most desirable. The Council have in a measure thought about the subject in one small instance, with the result that they are going to put before you a description of how you are to try to avoid dry rot. When that comes I would ask you to study it most carefully, because it may enable you to avoid something which may otherwise cost you a great deal of money. The three or four instances in which the matter has been dealt with by the Courts have been very bitter experiences for architects. I heartily thank Mr. Hudson, and I am very much in sympathy with his Paper.

MR. DELISSA JOSEPH [*F.*]: Mr. Hudson has chosen a very attractive topic for his Paper. The business aspect of our work is not as often considered in this room as one could wish. I was drawn to this meeting by the fact that we were to hear some criticisms from a gentleman who is in the rare position of having been trained both as an architect and as a lawyer, and he has certainly placed before us some observations which are of the character of candid criticism almost as it were from the outside, and we should feel gratitude to him for his courage in approaching us in the manner he has done. I have not had the advantage that some of the preceding speakers have had of perusing a proof of the Paper, and therefore I have had to form my impressions as the Paper was read. The general impression produced was that it was not so much a criticism of the system of education as an appeal for business methods to be applied to the practice of architecture. Mr. Hudson is a man of wide experience and will realise that it is impossible for a new-blown student to come out into the world of practice equipped with all the practical knowledge necessary for him to carry on the work of his profession on the strict business lines he has sketched. These qualifications are necessarily largely the outcome of experience. There is nothing, of course, to prevent a beginner taking the advice offered by Mr. Hudson in regard to the conduct of his work on business lines; that is to say, it should be conducted with due regard to system, it should be organised, and there should be kept a complete record of the work as it proceeds, and there should be no hesitation to write letters and to keep diary notes, so that at the end of a transaction there is a complete history of it to which reference could be made in the event of any disputes or differences with client or contractor as to the intention or method of carrying out the work. Everyone concerned in practical work will support me in the view that the secret of avoiding unpleasantness with clients and disagreements with builders is to conduct your work with system and on strict lines of business organisation, to keep a complete record of your proceedings, so that at the end of each

transaction you have its history in the *dossier* or portfolio containing your papers. Mr. Hudson has read a Paper full of suggestive and stimulating ideas, and I sincerely hope the suggestions and ideas he submits will bear fruit. On the other hand, I think he will be the first to admit that there is no necessary conflict between art and affairs, and that there is nothing to prevent the pursuit of the interesting and absorbing profession of architecture with due regard to businesslike methods.

MR. HUDSON, in responding to the vote of thanks, said: The last speaker very correctly put really what was in my mind, but which I did not like to put as plainly as he kindly said I might have put it, and therefore I am afraid that the student has come in for a little too much criticism and the architect for too little. I am rather reminded of what Lord Justice Bowen once said. The Judges were considering the preparation of an address to the late Queen at the opening of the Law Courts. The Judges began: "Conscious as we are of our own shortcomings," and so on in the usual form, and Lord Justice Bowen, in his very effeminate voice, said: "Do you not think we had better say: 'Conscious as we are of each other's shortcomings'?" I am afraid that criticism would apply to myself to-night. I feel ashamed that I have been so very bold as to come here and criticise.

In replying to some of the criticisms on my Paper may I say that I never intended to convey the impression that an architect should hurry to give a final certificate. If I were an architect I would delay it as long as I could. That was not my object. With regard to practical instruction in the School, a drawing was shown to me which a student—a very able young fellow—had made of a stone building. I said: "Can you write a description of the stone for that building; can you tell me whether it was hammer-dressed, whether it was rubbed, or whether it was axed?" and he could not. My suggestion is that he should be taught the different descriptions of tooling for a piece of stone. It is absurd to say he will find that out when he comes to write the specification, and will evolve from his own mind the way to put into writing what he has seen. It requires just as much technical knowledge to know how to describe what he has seen as it does to draw what he has seen. Mr. Maule suggested that I would not have made the criticisms I had done if I had seen what was going on in the School before I wrote the Paper. I think I should have made just the same criticisms, but I certainly was charmed with the methods they had of teaching drawing. They could not be better. There is only one observation I would make, and, I do so with great respect in an assembly composed of very able draughtsmen, I suggest that the tendency to make pretty drawings should be checked, and a student should be tied down to make his drawing absolutely in outline, and not have the gratification of touching it up and putting a little figure in the corner, and so on; he should have to think out his drawing in the boldest and coldest way, so that the design is seen in its very worst light and not in its very best light on paper. To my mind that should be the aim of the draughtsman in the School. I am glad I had one supporter with regard to standardisation, but I think I have been misunderstood. It seems to me it would be of the greatest value not only to students, but to architects, if every kind of material were accurately described on paper. There is, for example, more litigation over the working of stone than anything else I know of. Whenever there is a stone building there is a dispute as to how the stone is to be worked. In conclusion, may I say how delighted I am to have come amongst you, and I think you have been very good indeed to have treated me so kindly after the very bold way in which I have criticised members of my old profession. The only desire on my part, if I may say so, is to co-operate with the members of this Institute in seeing the profession of an architect advanced, and advanced by great strides.

TOWN PLANNING.

PAPERS COLLECTED BY THE R.I.B.A. TOWN PLANNING COMMITTEE.

XIII. EXTRACTS TRANSLATED FROM *DER STADTEBAU.**

[January–July 1904.]

Mr. Hensen, in a lecture at Munster, pointed out that many a public building would lose its dull, monotonous character if a considerable part of the necessary courtyard space had been placed in the street. Attention was also drawn to a precept derived from the town building of our ancestors, *i.e.* the planning of arcades in front of, or, even better still, in the houses of the business streets. As regards horticulture the lecturer recalled a Westphalian town which levelled its ramparts and turned them into a monotonous strip of unbuilt-on land with some rows of trees, bushes, and beds, the whole forming a rather dreary promenade; instead of leaving higher and lower pieces of ramparts and ditches here and there so as to give variations of height with pretty views and peeps through. Street extension should, as Alberti, the ingenious protagonist of the Italian Renaissance (1404–1472) recommends, be carried out in broken and fluctuating lines, which give a larger appearance to the town and the houses present themselves gradually and intermittently to the eye; there will be always some shade and shelter from the wind, and defence against enemies is facilitated. It is an objectionable custom for lines of streets to cross one another at a right angle as it causes continual stopping of the traffic. It is much more practical to form the junction of two converging thoroughfares at an oblique angle, and only to separate them again a little further on at an oblique angle. It is necessary at the same time, of course, to widen the streets at that part where the two run side by side.

Notes at the German Towns Exhibition in Dresden.

Though probably in days gone by old German towns were built without building plans being prepared in the manner that is customary to-day, still networks of streets were planned out, though the actual method of street planning was different. The direction of the streets did not formerly regulate the buildings, but the isolated, prominent buildings helped to decide the direction the street would take. . . .

Nor is it merely accidental that one bit after another is added to the picture of the town according to requirement and suitability, but with due regard to congruity with what already exists and the surroundings, in order to beautify the whole. Uniformity does not consist here in a premeditated plan in every detail, but in a constant regard for what has been handed down and in adapting the single object to the whole view.

The separate portions of the plans of Munich show how, even in the present day, favourable solutions for future building may be anticipated by still greater foresight in carefully considering general building possibilities, and may lead to the realisation of the desired effects by suitable designs of blocks, peculiar street corners, &c. By including in the plan suspended building projects or such projects as are likely shortly to be undertaken, it is possible to reserve good sites for public buildings, theatres, churches, &c.

Let us look first at the long stretch of the Arnulfstrasse [fig. 1, p. 411], which extends out to the west in a gentle double curve between the Nymphenburgerstrasse and the Central Station. The Schulstrasse is slightly curved so that it may run into it at a right angle. The Arnulfstrasse is then crossed obliquely by the wider Donnersbergerstrasse, the corners of which (and, indeed, at the obtuse angle) by setting back the building line—therefore by widening the junctions of the streets simultaneously — at the acute angles by inflection of the base lines become nearly rectangular. From the Renatenstrasse the Arnulfstrasse gradually widens so that the spacious carriage road can be divided by fountains and lamp-posts, which appear to form the guiding line across to the southerly direction of the street which further on becomes narrower again. The junction of the diagonal streets from the north is particularly fine; they do not run straight into the Arnulfstrasse (the main street), which would have produced ugly acute angles, but they run into fairly perpendicular cross streets which are suitably widened from where they branch off to the Arnulfstrasse. This elongation of the point of intersection of two by-streets out of the axis of the main street is the secret of the success of much of the street planning of the Middle Ages. In the same way at the end of the Arnulfstrasse where it expands into a square in front of the Royal Deer Park a special site for a church has been constructed at the side of the deer park, accessible conveniently from the main street and with a view on to it, thus providing for the design of a second square which ensures a quiet site for the church, but one that can easily be found—close to the line of traffic, while away from its noise, instead of being placed in the favourite position, exposed on all sides, in the very midst of the stream of traffic.

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FIG. 1.—THE ARNULFSTRASSE, MUNICH.

The same principles have been applied in other parts of the town.

In any plan for the enlargement of a town and the improvement of its communications not only regard for old buildings and the provision of building sites for future public buildings, but also the dovetailing in of new buildings into existing conditions gives great scope for beautifying the appearance of the town. There is a constant outcry in modern towns on account of the want of suitable sites for the erection of prominent buildings, and most frequently these have to be wedged into the flat street wall. Every attempt to avoid this stiffness should be encouraged. A building should not be erected and decorated as a thing apart, but it should be adapted to the style of building of the town, independent of but yet in harmony with its surroundings. By picturesque grouping of such buildings and spacious widening of the streets an ornamental centre for the town will be secured.

Bielefeld, with its present town hall and the theatre that is planned, is an illustration of this.

There was division of opinion whether these buildings should be massed or built at some distance from one another, and the casting vote was given in consequence of Camillo Sitte's testimony that "There is not the slightest doubt that, from the standpoint of fine monumental effect, the best results can only be obtained by the erection of groups of buildings; by combining several monumental buildings with several larger and smaller squares in an organised, well-arranged whole. This is the only way to obtain a good artistic effect, providing for the erection of monuments, fountains, bandstands, picturesque and at the same time inexpensive clumps of trees."

Camillo Sitte, in a lecture he gave shortly afterwards at Bielefeld on town building, concluded with the words "If everything is carried out according to the above principle you create a place which may be compared to a beautiful symphony, in which the details, fine in themselves, only obtain their grandest effect when combined as a whole."

Next in importance to erecting public buildings in squares and the square-like widening of streets comes the style of building of blocks of houses. At present the hygienic fashion is to build with openings or gaps between. This plan seems to be the best when the building block can no longer be divided up by intervening streets. The question of gaps between buildings will only arise, however, in particular instances. In Stuttgart, as is well known, there has been great opposition to the retention of such gaps, even where spacious building was required.

The Extension of the Town of Stuttgart.

The Mayor of Stuttgart, with reference to the extension of Stuttgart, says:—"A style of building which would be a gradual transition from town to

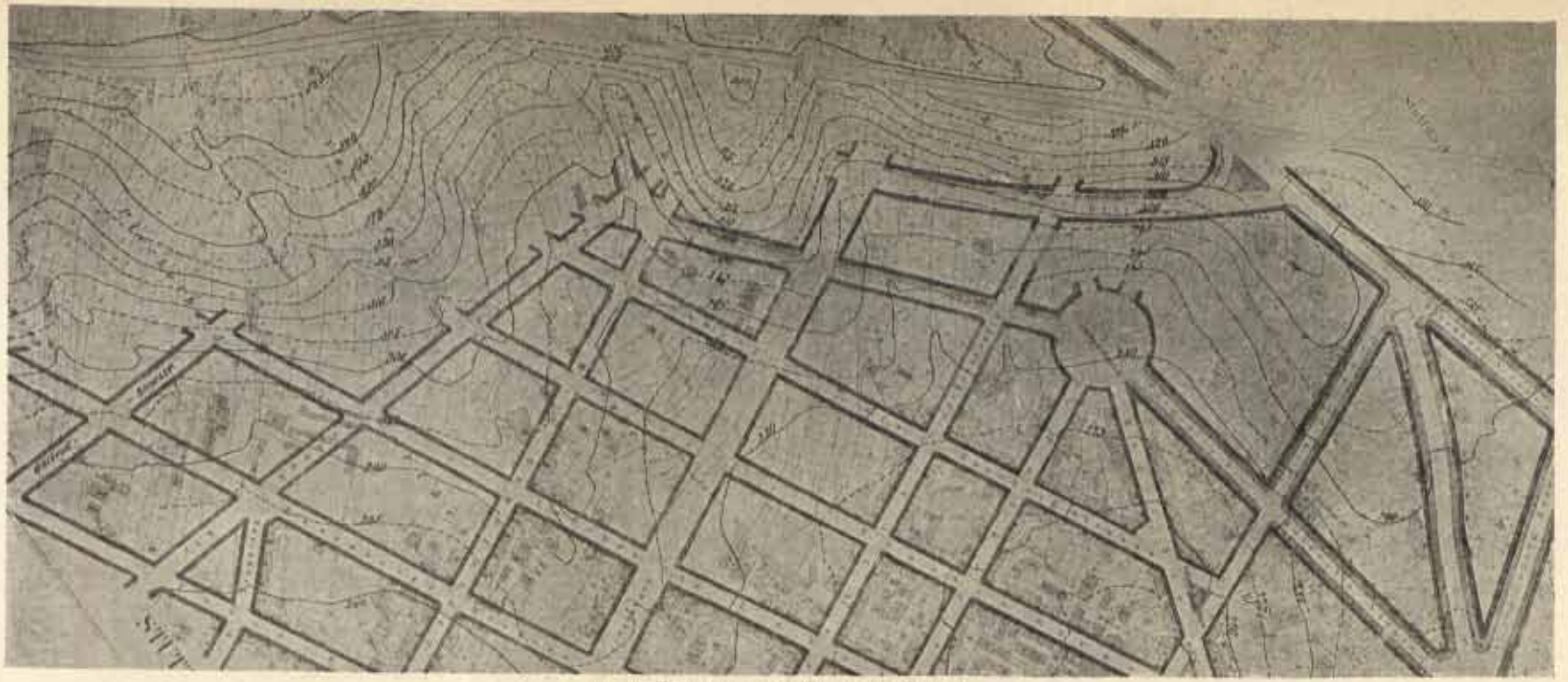


FIG. 2.—ROSENBERGSTRASSE, STUTTGART, 1860–1870.



FIG. 3.—ROSENBERGSTRASSE, STUTTGART, 1896.

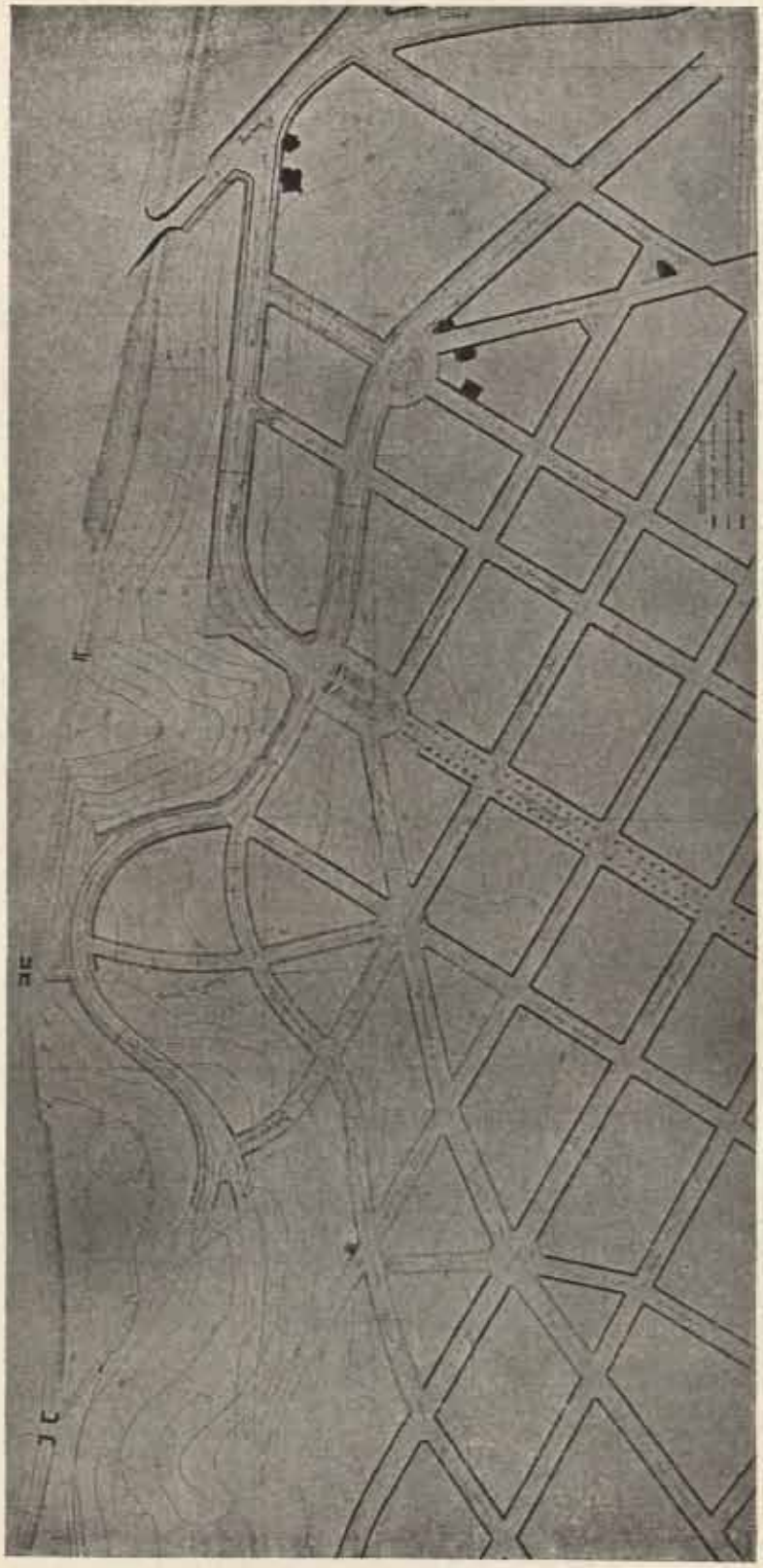


FIG. 4.—ROSENBERGSTRASSE, STUTTGART, 1901.



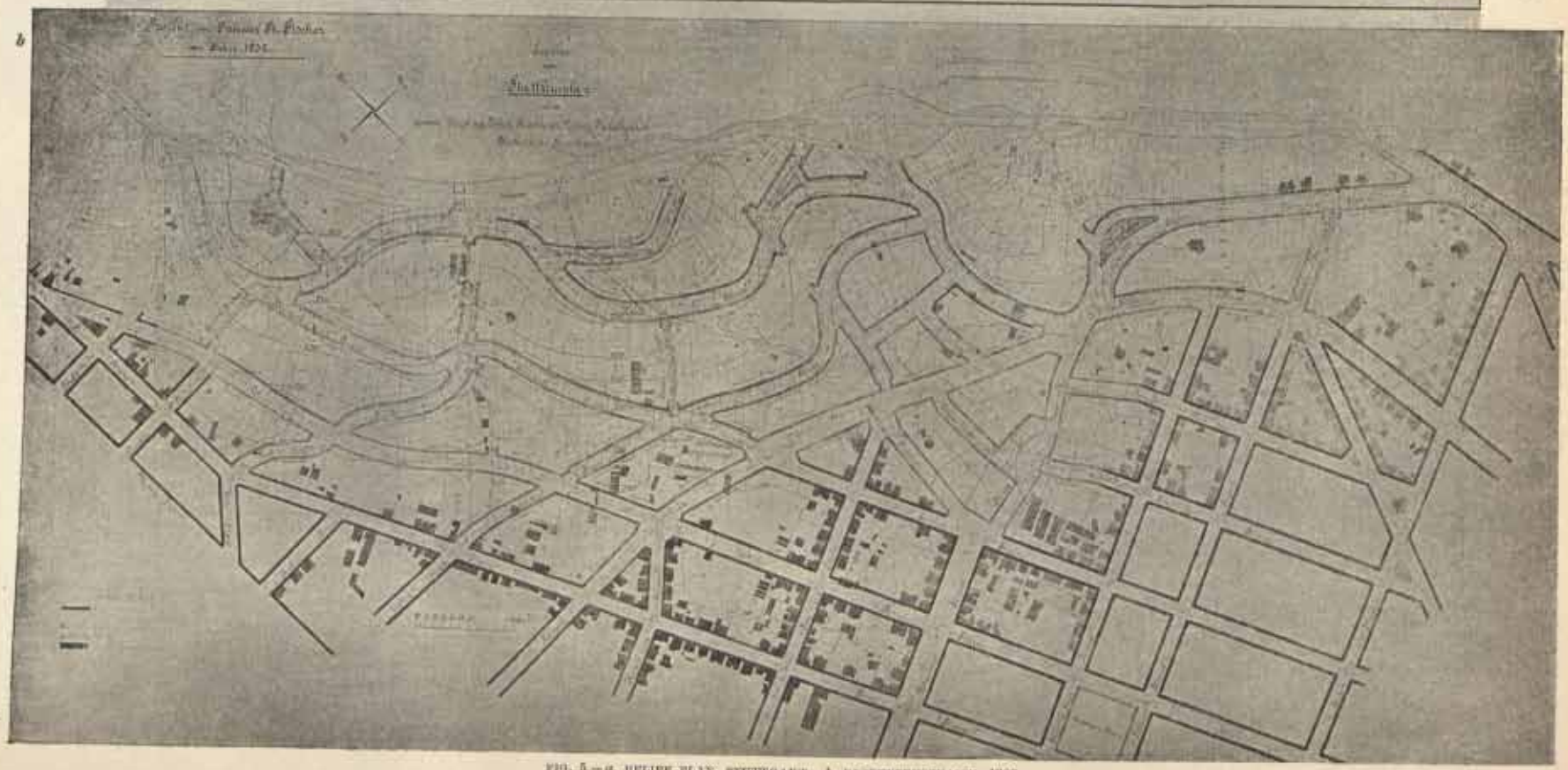


FIG. 5.—a, RELIEF PLAN, STUTTGART. b, ROSENBERGSTRASSE, 1902.

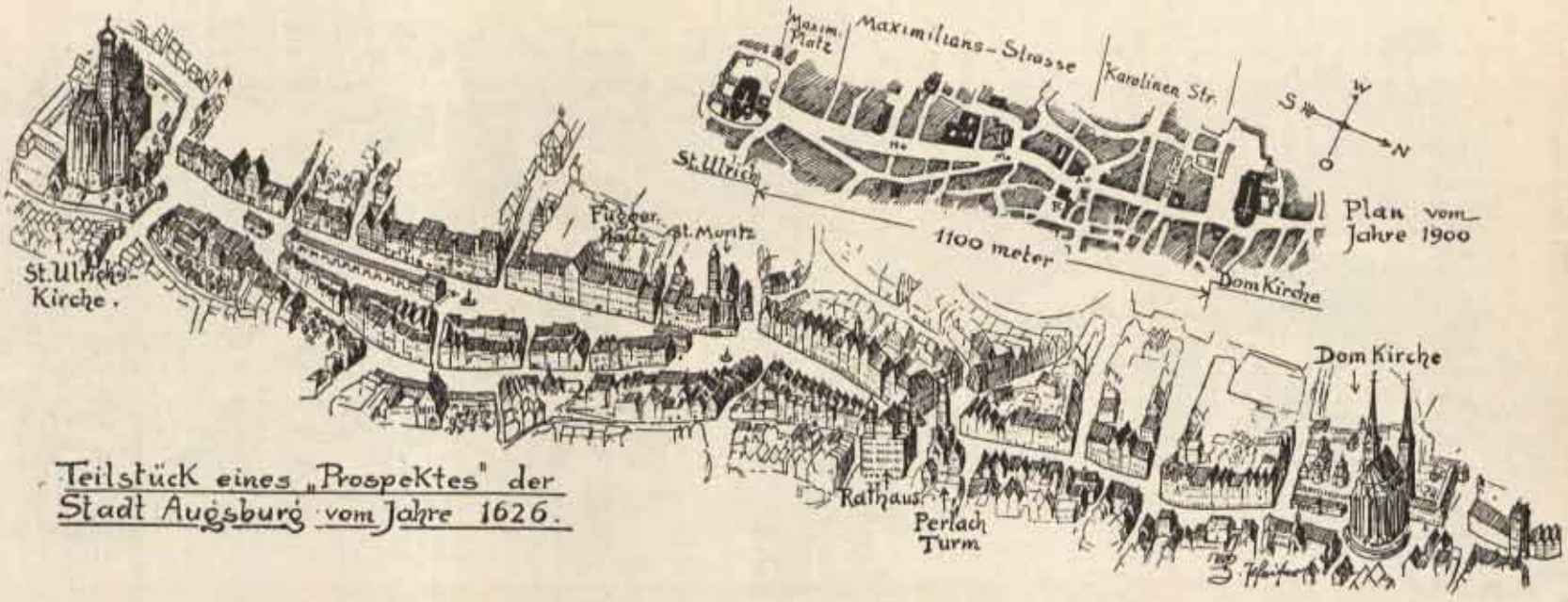


FIG. 6.—THE MAXIMILIANSTRASSE, AUGSBURG.



FIG. 7.—OLD NÜRNBERG.

country in character is not considered practicable, because, as time goes on and towns increase, streets planned in this way would become unsuitable. It is not possible to draw a hard and fast line where a town shall end and country begin, and in extending towns provision must be made for the future requirements of possible business and trade in the new district. Residential and business streets should more or less be dealt with on different principles. In business streets unquestionably the massed style of building is the most suitable. Such streets are necessary for the future economic development of the town. It is not, however, economical in streets of this description to waste valuable space by leaving gaps which lengthen communication and spoil the appearance of the town and the streets in question."

To the writer the most interesting plan is Professor Fischer's plan for the land lying west of the town, not only on account of its masterly scheme for the streets, but also on account of the history of its development, which is an excellent example of the development of modern town building. Figs. 2, 3, 4, and 5 [pp. 412, 413, 414] illustrate the main phases of this development up to the present time.

New Building Regulations for Vienna.

It has been recognised for many years that the existing building regulations have demanded alteration. The necessity for a new building law has been uniformly recognised, but what form it should take has been by no means agreed upon. The question is to be opened again by a new proposal from the Town Council. It is not possible here to go into all the details of the scheme, but we recognise with pleasure, and particularly note that artistic claims will receive greater consideration than heretofore, the regulation requiring plans of streets and passages to be rectilinear as far as possible having been replaced by a more general regard for the fine appearance of the features of the streets, and appreciation of the value of artistic and historical monuments. It is to be hoped that the proposed enactments will be put in force.

Contrast and Harmony in Town Building.

In the sea of houses in a modern large town it almost looks as if architecture were condemned to intolerable monotony by never-ending rows of masses of building. . . . Hardly a large town recently built has escaped the curse of the exactitude with which the rectangular network of streets has been forcibly drawn over the whole town. Too many plans of towns are startlingly like a checked trouser pattern. . . . The eye quite longs for resting places, for artistic breaks, for something different. Undeniably a wearisome monotony results from the lack of larger enlivening contrasts. Even good, well-designed monumental edifices placed close together lose their effect, unless relieved by smaller, simpler buildings, or by clumps of trees, grass, and expanses of water (Leipzig is an example of this error).

Compare with the above our old staple and residence towns. In these the principal buildings were so placed, and the streets and squares succeeded one another in such tasteful variety, that the different thoroughfares ran into one another without stiffness, and the best use was made of any variation in altitude in the landscape. The finest example of contrast and harmony is the main thoroughfare of the old commercial town of Augsburg—the Maximilianstrasse (fig. 6, p. 415). By the curving line of the street, widening here and narrowing there, you get a better view and clearness of grouping, with plenty of effective contrasts, and at every bend of the street new views. The diagonal positions of the buildings in consequence of the curves of the streets increase the impression they make and the enlivening play of light and shade.

Attention may be further called to the contrasts in the direction of the gable-ends: alternating groups of gables with transverse roofs, and high conspicuous tiled roofs with longitudinal roofs.

The desirability of continuous harmony may be pointed out, the well known street which runs through Old Nürnberg (fig. 7, p. 416) furnishing a good example of this.

It would be a mistake to suppose that all these fine curves and contrasts were so picturesquely arranged as the result of purely artistic intention; they are undoubtedly partly the outcome of earlier roads and neighbouring boundaries, partly the result of practical considerations of intercourse, purposes of defence and deliberations on the spot. But here we have the most striking evidence of the sound commonsense of our ancestors in not allowing themselves to be too closely bound down by timid building regulations and theoretical base lines, endeavouring instead to use to the best practical and artistic advantage the "accidentalities," the peculiarities of the building ground, and the existing conditions. The result was obtained by avoiding stiffness of design.

The principle to be deduced from the building of our old towns is to design with taste and to adapt the new design to the existing conditions, aiming at strong harmonious contrasts and continuous harmony of the whole.



9 Conduit Street, London, W., 19*th March* 1910.

CHRONICLE.

Revised Regulations for Architectural Competitions.

The discussion of the Regulations was resumed at the Business Meeting on Monday, 28th February, Mr. A. W. S. Cross, M.A.Cantab., *Vice-President*, in the Chair.

The Chairman reminded the Meeting that on the last occasion the then Chairman, Mr. Gibson, suggested that the discussion should be an open one, and that, if possible, they should avoid passing any formal resolutions, with the idea, if necessary, of referring the suggested regulations back to the Competitions Committee, and that the Competitions Committee should have power to co-opt on to the Committee certain members of the Allied Societies and others specially interested in the subject.

Mr. H. Heathcote Statham [*F.*]: If we do not pass any resolutions this evening, in what form is the opinion of the Meeting to be conveyed to the Committee?

The Chairman: The full report will be sent to them.

Before the discussion was continued on Clause 2, Mr. Wm. Woodward [*F.*] asked leave to make a suggestion on Clause 1. In lieu of the word "prepared" in the second paragraph, he suggested they should say the President is "willing" to act as honorary adviser.

Mr. E. M. Gibbs [*F.*], Sheffield, speaking on Clause 2, sub-section (*b*), suggested the substitution of the word "conditions" for "instructions." The conditions should be clearly stated as such, and the suggestions clearly stated as such. With regard to (*c*) he suggested the insertion of the word "all": "To advise promoters on the relative merits of *all* the designs." He remembered, when assessing a competition once, seeing a design which he thought had not the remotest chance of getting a prize, and his assistant wanted to put it with its face to the wall as out of the competition. He (Mr. Gibbs), however, would not allow this, and they put it up with the others and tested it in every way, and it came out first. It was unpretending, but it had real merit. The assessor should report on the merits of all the designs—that is, of all those which had complied with the conditions.

Mr. P. S. Worthington, M.A.Oxon. [*F.*], President of the Manchester Society, said there was a question of principle involved which deserved consideration. There were certain things, especially in view of the new By-laws, which the Council would regard as essential to the fairness of a competition. The document was headed: "Regulations approved by the Royal Institute of British Architects for Architectural Competitions," and it said: "The conditions should be based on the following suggestions." It seemed to him and to the Society which he represented that the two things were not in harmony. They seemed almost to be antagonistic. He did not see how a document which was a regulation could be at the same time a suggestion. When the new By-laws came into force there would be some control over members in regard to competing, and there must be certain definite principles upon which the Council would act. There would be certain things which were essential, and other things which were not essential. The essential things might be what the Council or the Institute determined. There were other things which were desirable but which were not essential. On the question of the essential matters the competition would stand or fall, and the Council would say, "This is a competition which members may go in for," or "Members must not go in for this competition." It should be laid down what are the essentials and what are not, and instead of the words "may" or "should" the words "must" or "shall" ought to be used. This was a question which ought to be very fully considered by the Competitions Committee. He supposed the main object they had in view was the appointment of an assessor. That should be a *sine quâ non*. Then they wanted to secure a certainty of the employment of the architect who was placed first; and next, fairness of payment. It was quite nice to say that the true interest of architecture was a material point involved, but, after all, though that might be the case—and he hoped it was so—that was not a point they could very well assume in this question. But the three things mentioned above seemed to him to be essential, and any clauses which dealt with those points were essential. He supposed the Council would say that if those conditions were not complied with, members should not compete. In the By-laws there would be powers which would make this an easy matter, at any rate theoretically. The essentials seemed to be dealt with in Clauses 1, 3, 7 and 10, but the exact clauses would be a question for fuller discussion. The rest of the clauses were very desirable and ought, no doubt, to be included in the suggestions—for they would be suggestions rather than regulations. Apart from questions of detail, he should like to raise the question of distinguishing between compulsory clauses and optional clauses.

Mr. Wm. Woodward: Clause 2, subsection (*a*), says: "Such documents to be so drawn up as to form an agreement between the promoters and the competitors." Does that mean that in the event of breach an action at law could be sustained?

The Chairman: That is the idea, I believe.

Mr. Woodward: Then there follows a paragraph in italics: "Notes.—It is essential in drawing up the instructions to state definitely which of the conditions must be strictly adhered to." I suggest that should be omitted altogether, because it ought to be assumed that all the conditions are to be strictly adhered to.

Mr. A. R. Jemmett [*F.*]: Could it not be made the duty of the assessor to advise the promoters on the question of site, as, for instance, advising them to spend a certain sum in acquiring an extra few feet of frontage where this was desirable? If the assessor cannot do this, then the competitors ought to have some freedom in the matter. With a few feet more one could often give a much better design, and one which would pay promoters to have even at some extra cost. They might spend £2,000 more on their site and get a building worth £500 a year more. The assessor might first of all examine the site and suggest the acquisition of some part of the adjoining property if this would benefit the scheme.

Mr. Snell: That could be met by my suggestion that the duties of the assessor should be to confer with the promoters as to the practicability of their requirements, especially on the question of cost.

Mr. Herbert Shepherd [*A.*] suggested a clause being inserted allowing promoters to be represented in a consultative capacity during the assessing of the designs.

Mr. George Hubbard [*F.*]: It would be perfectly fatal

to ask the promoters to assist the assessor in coming to a conclusion.

Mr. ALAN E. MUNBY [*A.*]: Has it been considered whether it is possible to lay down the matters which are likely to be essential and those which may be purely suggestive? If the assessor is tied down to matters which are of very small importance he may have to reject a very good design; on the other hand, if he is given no sort of lead at all it may add to his difficulties. To mention an experience of my own, I remember a competition in which no building lines were given, and a reference being made in the questions as to what the building lines were, the assessor, a man of considerable reputation, replied that he did not intend to trouble competitors to consider building lines at all. In this case the question of building lines was the whole essence of the plan. If it were possible to produce a schedule showing the kind of things which were essential and those which were merely suggestive, it might be a help to assessors as well as to competitors.

Mr. STATHAM: It is possible to draw up instructions which should make a clear distinction between those which competitors are to observe and those which are merely suggestions. You cannot draw up a general rule for the purpose. It would depend upon the way in which each set of instructions was drawn up.

Mr. GIBBS: I have found no difficulty in getting promoters to decide what were essentials and what were only suggestive. If assessors would take the trouble to consult promoters beforehand as to what were essentials they would have no difficulty in determining.

Mr. MATT. GARBUTT [*F.*]: It should be fairly easy to understand what are essentials and what are only suggestions, and I think it should be stated quite clearly. Competitors ought to know exactly that they must do certain things or they will be barred out; and there may be other points to which the assessor or the promoters may think it desirable to draw attention, but upon which they do not wish absolutely to tie competitors down. These should be enumerated under the head of suggestions and not be called "conditions," and it should be stated clearly in every set of general instructions that certain things are absolute conditions which must be complied with, and failure to comply with them should involve disqualification. They should be quite distinct from the suggestions as to what is merely desirable. That seems to me a thing which can be easily expressed in these regulations, if they are to go forward as regulations; but I would like to support the previous speaker, who drew attention to the fact that either these things ought to be mere suggestions all the way through, or they should be put forward to the public as absolute regulations binding upon the members of the Institute. If the Institute has power to control its members and the members of Allied Societies, it may be considered desirable to say to the public, "If you want competitive designs from the members of this Institute and its Allied Societies you must comply with certain conditions, otherwise none of our members will be allowed to compete under pain of expulsion from the society." If the Institute is strong enough to say that, it would be for the general good to do so. Otherwise it would seem desirable not to call these regulations, but to treat them as suggestions all through, and not to put in anything which had the appearance of dictating to promoters.

Mr. F. R. FARROW [*F.*]: The point put forward is a very good reason why these regulations should be referred back to the Competitions Committee. Ten years ago the Institute used to send out a paper called "Suggestions for the Conduct of Competitions." The document had now been altered to regulations, and we should refer it back to the Committee to use the words "shall" and "must" instead of "should" and "may." If it was desirable in the opinion of the Competitions Committee to separate some things into regulations and others into suggestions, there could be no objection to that being done, and probably it would be the better course to pursue.

Mr. G. A. T. MIDDLETON [*A.*]: First it is said that this paper should consist partly of regulations and partly of suggestions; and secondly, that any particular competition should be governed partly by regulations and partly by suggestions. Each seems to be reasonable. Several of them are better as suggestions than regulations, and several are better as regulations than as suggestions.

Mr. K. GAMMELL [*A.*]: I think it should be laid down in the regulations that the scale of the drawings should be as small as the character of the building shall permit. That should be more or less definitely stated and not left too open, because we all know the enormous amount of trouble which is incurred by increasing only slightly the scale of a drawing.

Mr. WOODWARD, speaking on Clause 3, suggested that after the word "architect" in line 2 the words "joint architect, or consulting architect" be inserted.

Mr. HARE: The first competition in which I was successful I was a very young man and unknown, and the Committee being doubtful about entrusting me with the work, engaged the assessor as consulting architect, and I was very glad to have him, for he helped me very much all the way through. I think that in cases of a similar nature if the assessor was prepared and allowed to become consulting architect, it would solve the difficulty, and I cannot see any objection to it.

Mr. STATHAM: I suggest that the clause remain as it is. The word "architect" includes joint architect.

Mr. GIBBS: I was assessor for a competition; the architect who was appointed carried the work halfway through and died. There was another architect appointed. They asked me under the circumstances to act as consulting architect. I did so, and I think I did right.

Mr. FRANK LISHMAN [*A.*] said it seemed to him a great hardship that employees should be debarred from taking part in a competition in which their principal was engaged as assessor. Assistants would have to think twice before engaging themselves to a principal who might be appointed as assessor for a class of building in which he was considered an expert. In all probability it was on account of his assistant's usefulness in that particular class of building that he was employing him. If assessors were appointed with discretion the man most eminent in the district in which the competition was being held would be the very man likely to be appointed, and he would be most likely to have younger men in his employ who were trying to win competitions for themselves. It would be a great hardship to disqualify a man from a competition on the assumption that he might be privy to its conditions or regulations. Take the case of an assistant who had determined to go in for a competition suddenly finding that his chief had been appointed assessor; he would either have to leave his employer or stay on and give up all idea of competing. It seemed to him most unjust. Then, again, supposing he resigns, from what date would his resignation count in order that his previous employ might not be a bar to his competing? He may not have heard of it till within a month or so. He did not conceive the position arising in his own experience, but he put it as a matter which ought to be considered by the Competitions Committee.

Mr. STATHAM: The real reason, I take it, is that the assessor might be well acquainted with the work and would recognize the design. But that applies in so many other things. You must trust to the honesty of the assessor. The passage about the employee is rather undesirable, and it is very hard upon a man who would have a chance in a competition to be debarred from it because his principal was the assessor. I think the provision very unfair.

A MEMBER: I have great pleasure in supporting Mr. Worthington.

Mr. MIDDLETON: If the assessor is appointed in advance

then the assistant will know, but if the assessor is appointed at the last moment then there would be a difficulty.

Mr. Snell: There are hard cases here and there, but that is not sufficient to justify the alteration proposed.

Mr. Lishman: Is the case quoted by Mr. Worthington sufficient to justify such a drastic provision?

Mr. Gammell: I took part in a competition which the assessor awarded to a man who was a pupil in his office; he afterwards awarded that gentleman another competition. I should like to support Mr. Worthington's remarks.

Mr. E. Godfrey Page [*A.*]: The profession ought to avoid not only evil but all appearance of evil. The hard cases are very scarce.

Mr. George Hubbard, speaking on Clause 4, said that there was a very big principle involved in this clause. Competitions were most expensive to the profession. Take, for example, a competition in which the outlay was to be something like £50,000. It is probable that there would be at least a hundred competitors. The approximate cost to each competitor would be £50, which multiplied a hundred times represents a total cost to the profession of £5,000. The return to the profession would be five per cent. on the capital outlay of proposed building, and this would return to the profession only £2,500. Hence the profession as a whole would lose £2,500 on that one competition. This large expense was brought about through the elaborate working up of the drawings. They all knew, however, that the main idea of the scheme which determined the success or failure of the design was arrived at in the very early stages. If that main idea could be put on paper in an intelligible manner for a preliminary competition, the assessor might be able to select say half a dozen of the best schemes, and have a second competition among the authors of those schemes in the usual way. Such a system would be more economical to the profession as a whole, and in consequence should receive the Committee's consideration.

Mr. John Leeming [*F.*] supported Mr. Hubbard's proposal and suggested the addition of the following sentence to Clause 4—after the words "so stated": "If the assessor further advises that the designs in their preliminary stage shall be submitted to him in such form, the foregoing method of preparing the drawings shall be modified to such extent as shall enable the assessor to limit the amount of work by competitors in the initial stage."

Mr. Jemmett supported Mr. Hubbard. The first competition should be for the architects' personal work; then a certain number should be selected and their drawings in the second competition be paid for according to the amount of elaboration required. If, for instance, perspectives were wanted, promoters would have to pay more for them. That would be fair all round, and would get rid of the difficulty some assessors felt in recommending a design before seeing it elaborated. The Institute ought to make a most determined effort to cut down the expenses of competitors. Under the present system, too, the work was so exhausting that the competitor could not do justice to himself. It was sheer donkey work. He really thought that with conditions such as he proposed a much better class of work would be sent in. He appealed to members of the Council, particularly to those who were so fortunate as not to need to take part in competitions, to support the Competitions Committee more than they had done in the past. They did not seem to realise the importance of the question, or to remember that all public works nowadays must be done by competition except when it was done by officials. Competitions therefore dealt with the most important part of their work. It was the class of work which should show the high-water mark of their achievement; it was work that many of their most gifted men were employed upon, and these men ought not to be handicapped by being forced to do such a large amount of unnecessary labour. Some great effort should be made to make the cost of competitions less and the awards better, so that a man's work should not be so largely a gamble as it was at the present day.

Mr. Statham agreed with Mr. Jemmett. The idea of having a sketch competition in which the work should be sketched by the architect himself was an admirable one. An assessor with any architectural perception in him would be able to judge from a small sketch of the power of the designer and the degree of originality of his design and how far it was worth going on with. This would save the profession an enormous amount of labour and expense. Some decisive sentence recommending that should be put in.

Mr. A. E. Mundy: I fully sympathise with Mr. Jemmett's ideas, but I should like to ask him whether he thinks that the general run of assessors would be strong enough to resist an attractive drawing, and whether his suggestion would not result in the architect having to produce a more and more elaborate design, until we finally get back to the old thing, and instead of having a staff in his office doing the work he would have to do the whole of it himself.

Mr. Matt. Garbutt: What would happen to a man like the late Mr. Bodley, for instance, if he had to depend upon his own sketches in entering for a competition? His chance would be very small in any scheme where it was compulsory for the sketches or drawings to be from the competitor's own hand.

Mr. Statham: You can see from a sketch-plan whether a man has an idea.

Mr. F. R. Farrow: These sketches would be viewed by a professional assessor, who knows how to form a judgment from sketches. The proposition is a most admirable one, and if carried out would be a great benefit to architects.

Mr. Percy Robinson [*F.*], President of the Leeds and Yorkshire Society: This is a case where the discretion of the Institute Council or the President might come in. It would not be applicable in all cases, but it would in the majority. A competition is generally either won or lost when the author has settled upon his scheme; but there are cases, in church competitions for instance, where something more elaborate is called for in the first instance.

Mr. Leeming: There is another point of view, and that is with regard to the feelings of the general public towards architects and competitions. In my experience in the North would-be clients have said: "Won't you take less than five per cent.? You compete for buildings and spend a lot of money on your drawings on the off-chance of winning. Now won't you take less than five per cent.?" If we can only limit the number of competitors, as architects and as a profession generally we shall stand better with the public. The medical and other professions would not compete against one another as we do, and I think if we can limit the number of competitors the general public will feel that the profession is not perhaps quite so "down-at-heel" as it appears to be by the great number who compete.

Mr. Jemmett: The present system is simply a relic of the bad old days when we used to compete for a lay committee to judge. We used to try to make pretty drawings to take in a person who knew nothing about them. Now we have technical assessors it is rather an insult to say that they cannot understand our design without elaborate pictorial drawings.

Mr. E. M. Gibbs, speaking on Clause 5, said he quite agreed with a good deal of what had been said with regard to Clause 4, and it might modify his opinion as to what should be done with Clause 5. He proposed that there should be a scale of payment for approximate out-of-pocket expenses, to be calculated on the amount proposed to be expended on the building. If some small scale were fixed, it would recoup architects their out-of-pocket expenses. These were often much more serious than

Mr. Hubbard said. Sometimes the total out-of-pocket expenses were four times the commission, and the value of the drawings submitted was very often as much as the value of the building. It was a most abominable waste of professional time and money, and they ought to resist it. He did not think the public were so unreasonable as to expect such sacrifices from them if they only put the case fairly before them. If fair regulations were made they would be accepted by promoters generally as a matter of course. They would say, "This is the regulation of the Royal Institute, the leading Society of the profession, and no doubt it is right," and they would follow it. The scale he proposed was as follows:—

Sub-section (*a*).—After the word "designs" in the second line insert: "Each competitor who submits a *bond fide* design shall receive part payment of his out-of-pocket expenses at the rate of half the scale named in sub-section (*d*)."

Sub-section (*b*).—Strike out the words "a specified sum for the preparation of his design" and insert: "Payment of his out-of-pocket expenses at the rate of the scale named in sub-section (*d*)."

Sub-section (*c*).—Strike out the words "the preparation of" and after the word "design" add: "and also payment of his out-of-pocket expenses at the rate of the scale named in sub-section (*d*)."

Sub-section (*d*).—Insert additional sub-section as follows:

Scale of payments for approximate amount of out-of-pocket expenses to be calculated on the amount proposed to be expended on the building.

For under £1,000 . .	£10.
For £1,000 to £250,000 .	£10 for first £1,000 *plus* two shillings per cent. on the whole.
For £250,000 to £500,000 .	The same as above for first £250,000, *plus* one shilling per cent. on the excess.
For £500,000 to £750,000 .	The same as above for first £500,000, *plus* sixpence per cent. on the excess.

This would work out as follows:—

£	£	£	£	£	£
1,000 .	10	20,000 .	30	150,000 .	160
2,000 .	12	30,000 .	40	200,000 .	210
4,000 .	14	50,000 .	60	250,000 .	260
10,000 .	20	75,000 .	85	500,000 .	385
15,000 .	25	100,000 .	110	750,000 .	447

Half these allowances for unlimited competitions.

Continuing, Mr. GIBBS said he thought promoters would accept such a scale. The sums payable would be small in proportion to the value of the designs sent in. They had the choice of many designs for another 5 per cent., and the payment would tend to prevent the promoters indulging in competitions too freely. Promoters seemed to think that architects would compete under almost any conditions, and that they might as well have their designs as not; but if they had to pay for them they would be a little less indulgent. It would also tend to lessen unlimited competitions. There would be more limited competitions, a more careful selection of competitors, and the chances of competitors would be improved. On the whole, he thought it would have a very beneficial effect. At the same time, there was very much in what had been said as to the reduction of the work in the drawings, and perhaps a combination of Mr. Leeming's amendment with his (Mr. Gibbs's) might be the best solution of the matter.

Mr. W. G. HUNT [*F.*]: It seems a very expensive business for a small competition. Supposing a competition for a small building of £1,000. You might easily have 100 men go in for it, and each would receive £10, making the cost of the competition as much as the building.

Mr. GIBBS: If that is a hardship on the promoters, is it not a much greater hardship on the profession? Does it not show an absolute injustice to us? The promoters have the choice themselves; they are not bound to have a competition, and if they do let them pay for it.

Mr. W. G. HUNT: Architects have no need to go in for them.

Mr. LEEMING proposed, after the word "designs" in the second line of Clause 5, sub-section (*a*), to add: "the same to be sketches in such form as the assessor shall advise, the object being to avoid useless work. Of these sketches a limited number shall be selected, and those who take further part in the competition and submit a *bond-fide* design shall receive part payment of their out-of-pocket expenses on the scale named in sub-section (*d*)." That at any rate would knock out the "office-boy". Some £750,000 was the amount the Admiralty and the War Office buildings were to cost in the original scheme. The Government paid £600 to each of the nine competitors chosen. On Mr. Gibbs's scale of £447 the latter amount was reasonable. But the London County Council only gave £200 to each chosen competitor for a somewhat similar building. In the recent competition for the Civil Engineers' building, which was to cost £100,000, according to the professional papers they awarded £200 each. In that instance Mr. Gibbs was below the amount given. On the whole he thought that Mr. Gibbs's scale would meet with the approval of promoters.

Mr. SNELL: On the County Council competition that would have meant a penny rate at least. He suggested that the words "In competitions for public works involving the expenditure of public money this method is recommended" should be cut out entirely. That sentence was put in in consequence of a resolution passed by the Institute in a moment of weariness. Why should it be limited to public buildings? If this provision were made in the interest of architects it should not be confined to public buildings. If it were made in the interest of architects merely as tax- and rate-payers, that was a matter of social politics with which the Institute had nothing to do at all.

Mr. J. W. STONHOLD [*A.*], referring to the desire to limit the number entering a competition, said that such limitation would not at any rate be in the interest of the young architect. Every competition should be as open as possible; what they should limit was the amount of work upon the competition itself.

Mr. GAMMELL said that it was probably known to some if not all of those present that the inclusion of the particular words under consideration could be claimed with absolute fairness to be due to his persistent efforts during the past three years. When introducing his resolution in 1907 he had given the fullest explanation of his reasons, and on subsequent occasions had amplified them, and therefore did not propose to recapitulate unless forced to do so. He could not agree with Mr. Snell that the resolution had been passed in a moment of weariness on the part of members, because, so far as his memory served him, it was passed within about thirty-five minutes of the opening of the meeting. What little judgment or instinct he (the speaker) fancied he possessed impelled him to the opinion that if he wished to see his recommendation adopted as part of the Institute's future policy, he must be able to bring home to members that the good of architecture had from the outset come first in his thoughts and the good of the individual second; and in all sincerity he asked them to believe this. He had said that from time to time he had amplified his reasons for prosecuting this matter and eventually arrived at a point where he believed nothing further could be said in support of his case. He was wrong. In November last he had the privilege of proposing this resolution before the Debating Society of the Architectural Association, having

for his opponent Mr. W. G. Wilson, Fellow of the Institute. In answer to his (the speaker's) pertinent question, "How is the young and unknown man to obtain inclusion in a competition of a selected nature, able though he might be, though not having carried out any work sufficiently important to justify his inclusion?" Mr. Wilson had expressed the opinion that the proper method for the young man to obtain such recognition was to cultivate the social virtues, which in his (Mr. Gammell's) opinion meant nothing more than to go out into society, to make himself known, to push himself, to speak on all or every occasion, whether he had anything to say or not—in fact, to pursue a policy which, to a man of any decent feeling, would be absolutely nauseating; and when he used the word "decent" he did so with careful premeditation. He thought that a great many present would agree with him that the class of men to whom they could look to produce good architecture was the very antithesis of the class whom he would term "Social Success & Co." The class of man he wanted to help was the one which by virtue of possessing the very power to produce good architecture was prevented "as a rule" from speaking for itself. As regarded the opinion of the provincial members who had spoken that evening, he felt compelled to suggest that their remarks could not be taken as being so disinterested as his. He did not blame, in these days of keen competition, any man or body of men for trying to keep as much work within their own hands as possible. But that raised the personal side of the question, to which he alluded at the outset of his remarks, and he honestly believed that if, on some future occasion when they came to vote on this particular suggestion, it were deleted, they would be voting, not for the good of architecture but for the good of the individual, and it was because of that he should ask them with all the eloquence at his command to vote when the time came for the inclusion of the clause, for thereby in his humble opinion they would individually be helping to carry out the principal aim of the Institute—viz. "the advancement of the art of architecture."

Mr. Hubbard: I think the wisest course would be to vote on this point whether those words remain in or not.

The Chairman: This is an informal discussion, the object being to elicit opinions.

Mr. Hubbard: May I ask what is the opinion of the Meeting on this point?

The Chairman: I take it that Mr. Gammell's resolution was carried at a General Meeting, and that resolution still holds good. By discussing this latter part of sub-section (a) of Clause 5 I do not think we get any further beyond eliciting opinions. The Institute has already passed a resolution recommending that in the case of public buildings involving the expenditure of public money the system of open competition should be adopted.

Mr. Statham: I should like to express another opinion n favour of its remaining.

Mr. Hubbard: I cannot see how you obtain the opinion of this Meeting unless a resolution is passed.

The Chairman: The report of this discussion will be brought before the Competitions Committee, and they will modify the regulations as far as they consider advisable and bring them before the General Meeting again.

Mr. Jemmett: I should add my support. Mr. Snell said that he did not see why it should not be added to private competitions if it is for the good of architecture. I take it that it is for the good of architecture, and I do not see why it should not be used for private competitions. I think it would be a very good thing.

The Chairman: Do you mean limited competitions?

Mr. Jemmett: Yes; private competitions will be the only limited ones now by this regulation. All public competitions for public money must be absolutely public. Therefore all limited ones must be for private individuals.

The Chairman: I should like to point out that this is merely a recommendation.

Mr. Jemmett: Yes, but it is to become one of our regulations. We are recommending that all competitions for buildings to be erected with public money should be entirely public, therefore Clauses (*b*) and (*c*) must refer only to competitions for private buildings, such as for large firms and semi-public bodies. If I am in order in speaking to these private competitions, I should like to say that there is nothing in sub-section (*a*) about the provision of an assessor. I take it the principle of this Institute in spirit, if not in form, is that no member shall take part in a competition unless there is an assessor. I should like to see some regulation laid down that where a firm asks half a dozen of their personal friends to compete for their new warehouse, or anything of that sort, there should be an assessor. Most of the men who are privileged to take part in these competitions would very strongly support an assessor for public competitions, and I see no reason why they should not support an assessor for a private competition.

Mr. Robinson: Surely it is governed by Clause 1.

Mr. Matt. Garbutt: There is a difference between a competition for a public building and a private competition such as Mr. Jemmett is referring to. The absolute requirement of an assessor and of an absolutely open competition for public works appears reasonable, but is it reasonable, supposing a firm wishes to ask three or four of its own friends to compete for a design for their work, to lay down any regulations for them? They may be perfectly willing to let the lay head of the firm decide, and I do not think it would be at all reasonable to interfere in such a case. There should be great care in drawing up these regulations, especially if there is any idea of making them compulsory, to avoid dictating where such a course is unjustified.

Mr. Gammell: I do not think we should interfere in private competitions at all. We have right on our side so far as public competitions are concerned, but not with regard to private competitions.

Mr. Hubbard: I support what Mr. Gammell has said.

Mr. Jemmett: If what Mr. Gammell says holds good (*b*) and (*c*) can be knocked out, because we are ruling that all competitions for public works should be open. If we are not to deal with private competitions, why suggest anything with regard to them? If we do enter into them, surely we are entitled to exercise some control.

Mr. Hubbard: Surely that cannot be so. I happen to be engaged in a private competition which the promoters intend to assess themselves. As a matter of fact, I think they are the only people who know what they want; a professional assessor could not tell them.

Mr. Middleton: This I think should be one of the permissive and not one of the compulsory clauses.

Mr. Henry T. Hare, *Hon. Secretary*: I think there is a good deal of confusion in the minds of some members with regard to the meaning of these three alternatives. In the first place it is not proposed at all to force promoters to adopt any one of them. Clause (*a*) merely says "this method is recommended." It is not proposed that this should be a regulation. There may be cases where promoters would prefer a limited competition, and the idea is, if they express such a wish, not to attempt to coerce them to adopt one of the other alternatives. It would be a great mistake to lay down these rules in too hard and fast a form. Clauses (*b*) and (*c*) could not be eliminated altogether, because the intention of the recommendation in the first clause is to deal with cases where public money is to be expended. But in many cases it is not public money in the sense which is intended there. Many large buildings are built by public subscription. Those would not be included in (*a*) at all—at least that is my opinion of its meaning. There are many large institutions, schools, and buildings of that kind, which are erected by private subscriptions, and they would not be included in (*a*). The

point I wish to emphasise is that we do not propose to lay down these things as absolute regulations.

Mr. HERBERT SHEPHERD: May I support Mr. Gammell in differing from Mr. Jemmett? I have had some experience recently in a competition for a very large firm in London. I was told by the promoter that he knew what he wanted, and I presume he was going to ask the advice of persons connected with his business in regard to the plans submitted, and, so far as I know, everything was perfectly fair and above-board. It is laid down in these regulations that competitions should be conducted in one of three specified ways. We cannot possibly say to a private promoter, "If you want to get a design from the profession you must comply with this particular regulation." That would be an impossible attitude for the Institute as a body to take up.

Mr. JEMMETT: I think the fact of members of the Institute competing in a private capacity, without being paid and without an assessor, does tend to weaken the force of these regulations as applied to public bodies. Take a man on the council of a public body, if he knows that three or four well-known architects are only too willing to compete for him personally without any assessor and without any remuneration, he does not see why a public competition should not be run on the same lines. I think we ought always to have assessors. Individuals cannot be expected to refuse to compete without one, although they may resent it, unless there is a law to support them. The Institute can save us from the position of having to choose between our self-respect and our daily bread, and it ought to back us up in every possible way. It is very undignified for us all to be sending in work to a man who knows nothing about it. A public committee might also say "We know what we want; why should we want an assessor more than a syndicate which is going to build a big warehouse?" It seems to me this is a point which the Committee ought to bear in mind.

Clauses 6 and 7 were passed without comment.

Mr. P. S. WORTHINGTON, on Clause 8: I see no reason for suggesting that the premiums should be merged.

THE CHAIRMAN: We suggest they should not be merged.

Mr. WORTHINGTON: The very fact that this point is mentioned suggests that they might be.

THE CHAIRMAN: Hitherto it has been so much the custom to merge them.

Mr. WORTHINGTON: It is not much of a hardship if it does merge, but I do not see why we should not get the premium if we can. I suggest that all reference to the merging of premiums be omitted.

Mr. WOODWARD, on Clause 9: I would suggest that the deposit ought likewise to be returned and that the following words be added: "all unsuccessful designs should be packed and carefully returned to the competitors at the cost of the promoters." I understand the drawings are sometimes sent back damaged and mutilated, and words to that effect might be put in.

Mr. GAMMELL: I obtained a resolution in this room in which the Meeting expressed the opinion that deposits should be returned, and I cannot understand why some action has not been taken. I brought it forward in consequence of a case in which I was treated rather scurvily.

THE CHAIRMAN: I think the answer is that no case of that kind has been reported to the Institute. If you had told us you would have given us the opportunity of taking action.

Mr. WOODWARD: Would the Honorary Secretary tell us what the following words mean in Clause 10: "the design is his own personal work"? Supposing a busy man entering into a competition it is necessary that he should employ his assistants in getting out the drawings.

Mr. HARE: It does not mean that the drawings must be his; it means that it is his design.

Mr. WOODWARD: That the competitor himself shall design, and the design may be worked out by his assistants and sent in to the assessor? Would that come within the scope of this clause?

Mr. HARE: That would be perfectly legitimate under this clause.

Mr. MATT. GARBUTT: The clause appears to be a sort of indication that this Institute and the Allied Societies include so many untrustworthy people that we have to guard against them. A competitor, a member of this Institute, having signed a declaration that the design is his own personal work, you say to the promoters by this regulation: "Now we have so many liars among us that you had better investigate what this fellow says and find out whether he is approximately telling the truth." I think it is a reflection upon the members of this Institute that this should go into Clause 10.

Mr. HARE: I think Mr. Garbutt is right. My own opinion is that this last sentence in heavy print is inadvisable. If this clause is not in, you always have that right.

Mr. PERCY ROBINSON: It would be very difficult to enforce this clause. I have known two or three instances where a false declaration has been made. But it is extremely difficult to bring it home to the offenders, and it seems to me it is somewhat undignified and useless to have this clause in unless we can enforce it.

Mr. WORTHINGTON: I think, on the contrary, if this clause is in, it will give the promoters the hold they require.

Mr. HARE: Surely they have the right without it. A man who makes a false declaration can be penalised.

Mr. JEMMETT: I would like to see the Institute have some sort of power in its hands, and use that power to call for this proof—the matter to be kept within the profession I mean. I should like it used on every reasonable occasion.

Mr. SHEPHERD: You say "premiated" design. That should apply to all the selected designs. It is a matter of principle.

Mr. J. MYRTLE SMYTH [*A.*]: Is it necessary to put in the words "in his own office"? I do not see that it matters where the work is done.

Mr. WOODWARD: Clause 11, sub-section (*d*) says: "If the assessor or assessors be of opinion that the outlay stated in the instructions is inadequate." Should the assessor, if he knows that the sum named by the promoters is inadequate, go on with the assessorship at all? Should not he at once tell the promoters that the building could not be decently done for the money and retire from the assessorship unless they are prepared to spend an adequate sum.

Mr. GIBBS: If the assessor allows the sum they propose to be put in as a condition I think he ought to insist upon it. If it is put in merely as a suggestive expenditure, then he should have liberty but not otherwise. I do not think he should have the liberty you give him in the regulations. I think it very unjust indeed to competitors who have probably limited their designs to comply with a condition as to cost that the assessor should have any option whatever.

Mr. HARE: This clause is put in to meet a case in which an assessor is called in after the designs are submitted, where the instructions have not been drawn up by an assessor. In a case like that, where he is of opinion that the building cannot be done for the money, he has to make the best of it. It would be foolish of him to retire from the assessorship. It is suggested he should make the best of a bad job, and say to the promoters: "The amount you have allowed is not sufficient, but I am going to suggest to you the best reasonable design, which can be done as economically as possible, to give you the result you want."

Mr. STATHAM: Should not it be said this should apply only when the assessor is appointed after the drawings are sent in, otherwise you are giving the right to an assessor to pass an inadequate sum?

Mr. HARE: I think it should.

Mr. JEMMETT: Does the Institute bar competitions in which there are no assessors? If a body wishes to start

on our lines, but does not appoint an assessor, do we bar our men going in?

Mr. HARE: What happens is this: A competition is advertised, and the conditions laid down by the surveyor, or whoever it may be, and then we step in and say: "We bar this," and they appoint an assessor; but the conditions have been drawn up before the assessor is able to form any opinion as to the adequacy of the amount.

Mr. GIBBS: Cannot we ask for the conditions to be revised in such circumstances?

Mr. HARE: Yes, but the correspondence goes on, and time passes, and so it happens in many cases that the assessor is not actually in touch with the promoters until the designs are sent in.

Mr. WOODWARD: The last sentence of Clause 13 says: "The setting aside of the assessor's award for any other reason constitutes a breach of faith on the part of the promoters." I suggest that you delete the words "faith on the part of the promoters" and insert "the agreement." It would then read thus: "The setting aside of the assessor's award for any other reason constitutes a breach of the agreement." I am assuming now that sub-section (*a*) in Clause 2 did in your opinion constitute an agreement. If you can make it now a legal binding agreement I should be pleased.

Mr. HARE: It would be a very desirable thing if it could be made a formal agreement, but it is not possible. There could be no agreement except under seal.

Mr. WORTHINGTON: Does not the penalising to the extent of 1½ per cent. meet the case? Can you always insist on the assessor's award being accepted?

Mr. HARE: You mean in Clause 7.

Mr. WORTHINGTON: Yes. It seems to me you cannot always insist on the assessor's award being accepted; but it is a very good guarantee if the promoters are penalised to the extent of 1½ per cent. if his award is not accepted.

Mr. SHEPHERD: With all respect, I submit that the contention of the Honorary Secretary with regard to competitions is not quite right. I understand the law to be that if the promoters send out conditions for a competition under seal they thereby enter into a contract with the competitors.

Mr. HUNT: I think I may say that is right. The seal in my case was on the conditions.

Mr. HARE: Before you were appointed?

Mr. HUNT: Yes.

No further observations being offered, on the motion of the CHAIRMAN, seconded by Mr. FRANK LISHMAN, the Meeting resolved that this question of the regulations for the conduct of architectural competitions be referred back to the Competitions Committee with a report of these proceedings, and with power to co-opt on to the Committee provincial and other members.

"Dry Rot" (*Merulius lacrymans*) in Timber.

The attention of the Council has been drawn to the issue by the Board of Agriculture and Fisheries in October last of a leaflet referring to the increasing prevalence of the disease known as "dry rot" in timber used in the construction of buildings, and, having taken the matter into consideration, the Council deem it to be in the interests of the building public generally to issue some observations thereon.

From the leaflet of the Board of Agriculture the following extracts are taken:—

"Infection with the dry-rot fungus sometimes takes place in the forest when felled timber remains stored there for some time. The first evidence of such infection is indicated by the presence of red stripes in the sawn wood. If such wood is thoroughly seasoned the mycelium present in the red stripes is killed. If the seasoning be neglected or imperfectly done, the mycelium, which possesses the power of remaining in a latent condition for some time, commences active growth when the wood is used in any part of a building where it is exposed to dampness, and this in some cases is unavoidable, as when the ends of joists are built into a wall.

"Under such circumstances dry rot eventually appears.

"On the other hand, the fungus is by no means rare on old beams and boards stored in wood-yards, &c., and it is mainly from such sources that spores or portions of the spreading mycelium are introduced into buildings by new wood which has become infected.

"The fruit of the dry-rot fungus presents the appearance of irregularly shaped, flattened, or undulating patches of variable size, adhering by their entire under-surface to the substance on which they are growing. When mature the central portion of the patch is covered with an irregular network formed by slightly raised anastomosing ribs, and is of a rich brown colour due to the enormous quantity of spores which are deposited on surrounding objects under the form of snuff-coloured powder. These spores are diffused by currents of air, or by rats, mice, and insects.

"The margin of the fruiting-patch is surrounded by a snow-white fringe of mycelium which spreads in every direction over surrounding objects, creeping up walls and passing through crevices, the advancing mycelium being supplied with food and moisture from the parent plant growing on wood.

"This food is conducted through cord-like strands which form behind the thin, advancing margin of mycelium.

"Owing to this supply of food from a central source the mycelium can extend over stones and other substances not containing food, and thus spread from the basement to the top of a house. Each time the migrating mycelium comes in contact with wood the latter is attacked and a new centre of food-supply is established, from which strands spread in search of other sources of food. The mycelium often forms felt-like sheets of large size that can readily be removed intact. These sheets are white at first but soon change to a pale grey colour—a character by which dry rot can be readily distinguished from another wood-destroying fungus, *Polyporus fomentarius*, even in the absence of fruit, the felted mycelium of the latter remaining permanently white.

"The specific name of *lacrymans*, or 'weeping,' alludes to the power of the fungus to attract moisture from the atmosphere. Under certain conditions moisture is absorbed to such an extent that it hangs in drops, or even drips from the surface of the fungus. This moisture assists very materially in rotting the timber, which afterwards becomes quite

dry and friable. Hence the popular name, 'dry rot,' which alludes to the last and most frequently observed stage of decay."

The depletion of the more matured forest trees resulting in the importation of immature wood is said to be one of the contributory causes of the spread of the disease.

Spores may exist in the earth arising from the roots of trees or other source.

The rapid completion of a house before the materials of which its carcase is constructed have had time to dry thoroughly conduces to the germination of dry rot.

A warm, damp atmosphere surrounding the wood, such as exists under a floor immediately over the ground and in unventilated cellars, is another condition conducing to the spread of the disease.

Although, as above remarked, immature or imperfectly seasoned timber is said to be a cause of the spread of the disease, yet thoroughly matured and sound timber in a warm, moist atmosphere will readily fall a prey if attacked by the mycelium of dry rot, once a spore has been introduced.

It has been proved that the spores of the disease can be carried from house to house on the clothes or tools of workmen, and that wood can be infected from a spore on a carpenter's saw.

From the foregoing it will be seen that the disease may have been introduced (*a*) in the timber, (*b*) from the adjacent earth, and (*c*) accidentally by the importation of a spore. These are conditions over which the architect has obviously no control.

The School Buildings Inquiry.

The Departmental Committee appointed by the President of the Board of Education to inquire into the possibility of reducing the cost of buildings for public elementary schools,* in a communication to the Institute Council dated the 3rd inst., intimate that "they would greatly value any assistance by way of personal evidence or otherwise which the members or professional advisers of the Institute may be in a position to give them in dealing with the subject of their inquiry." The Council have replied expressing their willingness to do anything in their power to assist the Committee, and as a first step have nominated Messrs. J. Osborne Smith [*F.*], W. Gilmour Wilson [*F.*], and Henry W. Burrows [*A.*] to attend before the Committee and give evidence on the subject.

Mr. Charles Bathurst, in the House of Commons on the 8th inst., asked the President of the Board of Education (Mr. Walter Runciman) whether the terms of reference to the recently appointed Departmental Committee on School Buildings were intended to include the consideration of what was the best type of building for an elementary school, and what was the best internal arrangement of classrooms, cloakrooms, and offices, bearing in mind not merely present convenience, but also the possibility of future extension; and, if not, whether in view of the differences of opinion among school architects, and their occasional lack of foresight in these matters resulting in increased expenditure on the part of local education authorities, he would specifically widen the terms of reference so as to include this consideration.—The President of the Board of Education replied: I purposely restricted the reference to the Departmental Committee to materials and methods of construction in order that this small Committee might be able to deal with the matter expeditiously. I think it would not be at all in the interests of local education authorities that I should extend the reference so as to include the whole question of school planning, which is very complicated. As regards school architects, I am disposed rather to welcome than to discourage differences of opinion, and in the interest of progress, which involves a certain amount of experiment, I should be very reluctant to prescribe any type or types of school buildings as the best.

* For constitution of Committee and terms of reference see JOURNAL, 5th March, p. 389.

The Government Offices, Whitehall.

Lord Claud Hamilton, in the House of Commons on the 7th inst., asked the First Commissioner of Works whether he would consider the expediency of removing the painted wood hoarding which had for so many years disfigured the stone screen facing the entrance to the Admiralty in Whitehall; and whether he could hold out any hopes of the completion of the towers of the Home Office in Whitehall in accordance with the design of the architect.—Mr. Harcourt: The reply to the first paragraph is in the affirmative; but the cost will be considerable, and I am not prepared at this moment to incur it. I much regret that financial exigencies will not permit me to undertake the completion of the towers at present.

The Queen Victoria Memorial.

Mr. Douglas Hall, in the House of Commons on the 7th inst., asked the First Commissioner of Works whether he could say when the Queen Victoria Memorial facing Buckingham Palace would be completed; whether any time for the completion was stated in the original contract or commission, and, if so, would he state the time; and was he aware that the present condition of the memorial was an eyesore to everyone using the Mall.—Mr. Harcourt replied: I anticipate that the work will be finished in the course of the next twelve months. No actual date for completion was fixed in the original contract; the progress of sculpture is always doubtful, and it is not usual to name a date. Mr. Brock, the sculptor, asked for ten years, and the memorial will probably be completed within seven years from the date of contract.

—Mr. Gibson Bowles asked if it was proposed to defer the opening of the Mall into Charing Cross until the completion of the memorial.—Mr. Harcourt said he hoped to open the Mall as early as possible, but he was rather dependent on some work of the County Council outside the confines of the Royal Park.

The Royal Gold Medal, 1910.

The following letter addressed to the Hon. Secretary and Secretary of the Institute has been received from General Sir Dighton Probyn :—

Buckingham Palace, 2nd March 1910.

GENTLEMEN,—I have to acknowledge the receipt of your letter of the 1st inst. in which you announce for the information of his Majesty the King, that the Royal Institute of British Architects has awarded the Royal Gold Medal for 1910 to Mr. Thomas Graham Jackson, R.A.

I have had the honour to lay your letter before the King, and I am now commanded to signify to you his Majesty's approval of this award.—I am, gentlemen, yours faithfully,

D. M. PROBYN,
General Keeper of His Majesty's Privy Purse.

Dinner to Mr. Edwin T. Hall.

Mr. Edwin T. Hall finding it necessary owing to pressure of private business to resign his seat on the Institute Parliamentary Bill Committee, the President, recent Past Presidents, and members of the Council are entertaining him to dinner as a mark of their appreciation of the eminent services he has rendered the Institute in connection with the work of this Committee and its predecessors the Charter Revision and By-laws Revision Committees. The function is to take place at the Café Royal, Regent Street, on Monday the 21st inst.

Mr. Lever's Benefactions: Gifts to the Schools of Civic Design and Architecture, Liverpool University.

Mr. W. H. Lever, who was recently appointed chairman of the Liverpool School of Tropical Medicine in succession to the late Sir Alfred Jones, has given particulars of a munificent scheme by which he desires to help the University and its work. Mr. Lever explains that the result of his recent action against certain London newspapers was that Lever Brothers had secured a sum of £91,000 in damages. He had never at any time intended that the money should go to himself, and in looking round to see what he could do to get rid of it he had thought of the Liverpool University. Arrangements had been made with the owners of the old Bluecoat School for a lease for a number of years. During that period the University could have the option of purchasing the school for a sum approximately of £24,000. Any time when the University exercised that option he would pay the money, and the school would be furnished. If the building was not found suitable, then he would pay £24,000 for the erection of a building adjoining the University, in which the School of House and Town Planning could be accommodated and also the School of Architecture. In the meantime, while the University were considering whether they should exercise the option, he would pay the rent of the school. He wished to provide some money for the School of House and Town Planning, the School of Tropical Medicine, and the School of Russian Studies. He was the owner by purchase of £60,000 worth of shares in the Bromboro Port Estate Company, and he proposed to transfer these to the University. Those shares, which represented one-half of the company, would in future years be a source of very great income to the University. In the meantime the shares were not paying a dividend, so that he had arranged that for ten years he would guarantee to pay 3 per cent. on the £60,000, which would make £1,800 a year for ten years. He had arranged, with the consent of the University, that of this £1,800 a year £800 should go to the School of Civic Design, £800 to the School of Tropical Medicine, and £200 to the School of Russian Studies.

Memorial to Mr. Bodley.

The Committee of the memorial to the late Mr. G. F. Bodley, R.A., for which up to the present donations have been received or promised amounting to about £350, have decided to proceed at once with the personal part of the memorial—namely, the erection of the mural tablet and bust—leaving the reredos, which was designed by Mr. Bodley, to be carried out as soon as sufficient funds have been raised. Meanwhile donations will be acknowledged by the Treasurer, the Rev. H. B. Coward, Church of the Holy Trinity, Prince Consort Road, Kensington Gore.

The A. A. Play.

The A. A. Play 1910, "Arctia : a Legend of the North," written by Gervase Bailey, the music by Leonard Butler, is to be performed at the Royal Court Theatre, Sloane Square, on the 18th and 19th April. The usual Students' night has been abandoned, and both nights will be Ladies' nights. The Committee state that they have decided to utilise the gallery, as they feel that architects may like to have the opportunity of sending their junior staff to see the play.

Obituary.

HENRY JARVIS, *Associate* 1866, *Fellow* 1878, of Brighton, formerly of 29 Trinity Square, Borough, died at Rome on the 4th March. Mr. Jarvis was educated in the Engineering Department of King's College, and served five years' pupilage with his father, the late Henry Jarvis, architect, and District Surveyor of St. Giles's, Camberwell. In 1867 he was granted a Certificate

of Competency to act as District Surveyor under the Building Acts, and the same year was taken into partnership with his father. Works carried out by the firm included the churches of St. Stephen, Walworth; All Souls, Grosvenor Park, Newington; St. Augustine, South Bermondsey; St. Paul, Holloway; St. Mark, Walworth. They were the architects of the improvements in Winchester and Cathedral Streets, together with the covered stands, the flower market, &c., of the Borough Market, 1897; and of extensive additions and alterations at the Constance Road, Camberwell, Workhouse for St. Giles's Guardians. Mr. Jarvis prepared the plans and designs for the coroner's court and mortuary, St. Mary's, Newington, S.E.

George Thomas, of Queen's Chambers, Cardiff, whose death is announced at the age of sixty-one, was elected Fellow in 1901 under the proviso to By-law 9, being at that time President of the Cardiff, South Wales, and Monmouthshire Society. Mr. Thomas started practice about the year 1873, and was for some years in partnership with Mr. Edwin Seward, of Cardiff. Among the principal works of the firm were the Cardiff Infirmary, the Exchange Buildings, Mount Square, Cardiff, the Cardiff Town Hall Extensions, Higher Grade Schools, the Cardiff Workhouse, &c. Later, in independent practice, he carried out the Intermediate Schools and the Masonic Temple at Cardiff, Board Schools at Barry, and hotels at Barry and Aberavon.

Sir Thomas Drew, LL.D. Dublin, President of the Royal Hibernian Academy, had been a Fellow of the Institute since 1889, and as President of the Royal Institute of Architects of Ireland had represented that body from 1892 to 1901 on the R.I.B.A. Council. He was President of the Society of Antiquaries (Ireland) from 1895 to 1897, and had recently been appointed to the Chair of Architecture at the National University of Ireland. A biographical notice will appear in an early issue.

COMPETITIONS.

Acton School.—Walsall (Bloxwich) School.

Members of the Royal Institute are advised that the Competitions Committee are considering the conditions of both these Competitions with a view to their amendment.

Royal Colleges of Physicians and Surgeons.

The result of the competition for the building of a new examination hall to be erected on the site of the four houses, Nos. 8, 9, 10, and 11 Queen Square, Bloomsbury, for which seven architects were invited to compete, was made known on Wednesday at a joint meeting of the Royal Colleges of Physicians and Surgeons, when Mr. T. E. Collcutt —who was appointed assessor—awarded the first premium, viz. the appointment as architect for the new examination hall, to Mr. A. N. Prentice [*F.*] The three other premiums, £100, £75, and £50, were respectively awarded to Mr. Henry T. Hare [*F.*], Mr. E. Stanley Hall, and Mr. John W. Simpson [*F.*].

Warrington Elementary Schools.

It will be remembered that the conditions of the Warrington Elementary Schools Competition were so objectionable as to call for the intervention of the Institute Council and their ultimate recommendation to members to take no part in it [Journal 6th November]. It appears that the Warrington Master Builders' Association, sympathising with the architects, resolved to support them, and the following letter from the Association addressed to the Town Clerk, Warrington, has just been made public:—

20th January 1910.

Dear Sir,—It has been brought to the notice of this Association that your Council have invited competitive plans from architects for the above schools, under conditions which are entirely new and detrimental to all those entering the competition, and which conditions have already been condemned by the Royal Institute of British Architects.

My Association is satisfied that the conditions are of a very unfair and arbitrary nature, and under the circumstances request me to inform you that the members of this Association will be recommended not to tender for the work unless the unfair conditions are removed.—Yours faithfully, Bertram B. Moss, *Secretary*.

International Competition for Monument at Berne.

In the Journal for 5th February some particulars were given of the international competition which is being promoted by the Swiss Federal Council for the erection of a monument at Berne to commemorate the foundation of the International Telegraph Union. The monument is to be erected on the Place Helvetia midway between the History Museum and the Kirchenfeld Bridge, and article 3 of the conditions requires that the monument must be in harmony with the site and its surroundings. Since the conditions were issued a scheme has been put forward for the erection of art galleries on the Place Helvetia on each side of the approach to the bridge, and in view of the requirement in article 3 the promoters think it well to call the attention of competitors to the new aspect the Place Helvetia would present should the proposed galleries be erected on the hitherto open site. The galleries, it is stated, would be simple but artistic in character, and not exceed a height of about twenty-six feet. A revised plan has been issued showing the sites proposed for the galleries, and copies may be seen in the Institute Library. In a memorandum which accompanies the revised plan the promoters think it advisable to point out that the erection of the galleries is not yet absolutely decided upon, and that competitors in making their designs should

take into account the two eventualities, the erection and the non-erection of these buildings on the Place Helvetia. The British representative on the jury of assessors is Sir George Frampton, R.A. [*H.A.*].

ALLIED SOCIETIES.

Transvaal Institute of Architects.—The *South African Commerce and Manufacturers' Record* for February reports the proceedings at the recent annual general meeting of the Transvaal Institute of Architects. The building boom, it is stated, has stirred up the profession to a sense of its responsibilities, and this was probably the largest gathering of the kind that has ever taken place in South Africa. The President, Mr. Walter Reid [*F.*], summed up the objects and aims of the Institute as follows:—1. To complete the negotiations recently started for the formation of a South African association or amalgamated body of architects, on lines similar to those of the Institute. 2. To promote an educational programme that will allow young architects to be trained within the country; and, as part of the programme, to arrange for the collection of models and plaster casts of details and examples of work on similar lines to the Architectural Association Schools, Westminster. The work to be carried on in conjunction with existing universities. 3. To make representations in the proper quarters with a view to regulating the amount of architectural work to be done by salaried public officials, endeavouring to secure to private practitioners a greater share of Government and municipal patronage. Public departments should exist more for the maintenance and upkeep of public buildings than for their designing and construction. 4. To prepare and publish a quarterly journal, also an annual calendar, so that the Institute may exchange literature with and make themselves known to similar institutions in other parts of the world. 5. To grapple with the matter of competitions and clear the air of the many misconceptions surrounding the adoption of the principle. 6. To evolve principles and prepare measures for presentation to the forthcoming Union Parliament, in the interests of the country, the profession, and the general public.

Edinburgh Architectural Association.—The Association has just published Vol. V. of its *Transactions* [8vo. Edin. 1910], the work comprising a selection of the lectures delivered before the Association in the sessions 1905 to 1907, together with the President's Addresses, and a record of visits made during the same period. The lectures include: "Moorish Architecture in Spain," by John Keppie [*F.*]; "An Old Scottish Town," by James A. Morris [*F.*]; "Ferro-Concrete Construction," by T. J. Gueritte, B.Sc.; "What H.M. Office of Works is doing for Historical Buildings in Scotland," by W. T. Oldrieve, F.S.A. Scot. [*F.*]; "The Æsthetic Duty of a Corporation towards a City," by Bailie W. Fraser Dobie; "Scotch Gardens and Garden Architecture," by R. S. Lorimer, A.R.S.A. [*F.*]; "Edinburgh Castle," by Hippolyte J. Blanc, R.S.A. [*F.*]; "Steel Building Construction," by J. R. Sharman, A.M.Inst.C.E.; "Pinkie House," by Thomas Rose, F.S.A. Scot.; "The Sanitary Consideration of Building," by James L. Lawrence; "The Sculptor and the Garden," by Walter Gilbert (Bromsgrove Guild); "Town Planning," by Barry Parker; "Historical Notes on the Destruction of Scottish Ecclesiastical Buildings in the 14th century," by D. Hay Fleming, LL.D.; "Small Sewage Installation," by Gilbert J. Fowler, D.Sc.; "Dalkeith," by Thomas Ross, F.S.A. Scot.; and various communications on the Restoration of the Chapel Royal, Holyrood.

Royal Architectural Institute of Canada.—Designs are invited from Canadian architects and draughtsmen who are British subjects for a Tower to commemorate the Federation of the various Provinces whereby the Dominion of Canada came into existence in 1867. The Tower is to be erected at Halifax, the cost not to exceed 22,000 dollars. The competition is to be conducted by the Royal Architectural Institute as follows: Each Provincial Association of Architects will invite its members to submit competitive designs, and will select the three best from those submitted and forward them to the Royal Architectural Institute. The designs so selected will be submitted to a Board of Assessors composed of the President and two members of the Council of Provincial Associations, who will select three plans to go forward to the final competition. The final selection will be made by the President of the Royal Architectural Institute, and the Professors of Architecture of the McGill University, Montreal, and the University of Toronto. To the authors of the designs placed first, second, and third, medals of gold, silver, and bronze respectively will be awarded by the Royal Architectural Institute. The author of the design placed first will be asked to prepare working drawings and specifications with sufficient details to carry out the work; it is felt, the conditions state, that the patriotism of Canadian architects can be counted upon in this respect, the elimination of profit being in the nature of a contribution.

MINUTES. X.

At the Tenth General Meeting (Ordinary) of the Session 1909-10, held Monday, 14th March 1910—Present, Mr. Ernest George, A.R.A., *President*, in the Chair; 27 Fellows (including 8 members of the Council), 40 Associates (including 1 member of the Council), 1 Hon. Associate, and several visitors—the Minutes of the Meetings held Monday, 28th February 1910 [*ante*, p. 392] were taken as read and signed as correct.

The Hon. Secretary announced the decease of George Thomas and Henry Jarvis, *Fellows*.

The Hon. Secretary having further announced the decease of Sir Thomas Drew, P.R.H.A., *Fellow*, Past President of the Royal Institute of the Architects of Ireland and sometime Member of the R.I.B.A. Council, the regrets of the Institute were ordered to be entered on the Minutes, and a vote of sympathy and condolence was passed to the relatives of the late member.

The following members attending for the first time since their election were formally admitted by the President:—viz. William Roland Howell, *Fellow*; Wilfred James Brough, William D'Arcy Cathcart, Edward Ernest Blunt Claypole, William Goodchild, Charles Ernest Hanscomb, Francis Osler, Francis Gordon Troup, *Associates*.

A Paper by Mr. A. A. Hudson [*H.A.*], Barrister-at-law, on THE BUSINESS SIDE OF ARCHITECTURE, having been read by the author and discussed, a vote of thanks was passed to him by acclamation.

The proceedings closed, and the meeting separated at 10 p.m.



ARCHITECTURE ON THE EASTERN SIDE OF THE ADRIATIC.

By George Hubbard, F.S.A. [*F.*].

Read before the Royal Institute of British Architects, Monday, 4th April 1910.

THERE is no part of Europe less understood and less visited than the Balkan States. The complicated history of the country deters many from attempting to grasp its checkered sequence of events, and the inhospitable nature of some of its provinces preserves them from becoming popular resorts for the ordinary Continental traveller. Few lands, however, are more interesting, and the struggles that have taken place in this great peninsula lying between Europe on the west and Asia on the east have preserved Europe from being over-run by the Asiatic. A very short reference must be made to the leading historical events, in so far as they have influenced the architecture of the Adriatic coast towns.

Various Greek colonies settled on some of the Dalmatian islands. Perhaps the earliest to arrive came from Syracuse, and were settled by Dionysius the elder on the island of Lissa (Issa) B.C. 387. Two years later the Greek colonists passed on to the mainland at Stobrez and Traü. No purely Greek architectural remains have been discovered ; but Greek inscriptions, Greek vases and coins have been found. The Greek colonies continued until the third century B.C., when they were compelled to appeal for the assistance of Rome against the Illyrians. Who the Illyrians may have been is perhaps a little doubtful. At the time when the Greek colonists called Rome to their aid the Illyrians probably occupied the greater portion of the peninsula, and perhaps that wild race now occupying the southernmost State, Albania, may be their descendants. The warfare between the Romans and Illyrians was continued till the beginning of the Christian era, when the Illyrians were conquered and Dalmatia became a province of Rome. In the year 284 the Roman Empire fell to Diocletian, whose palace at Spalato forms the great central point of interest of Dalmatia.

Constantine, who reigned from 306 to 337, moved the seat of government from Rome to the old Greek city Byzantion on the Bosphorus, which has ever since been known as Constantinople, or the city of Constantine. The chief power was thus placed in a city which was Christian from what may be called its new birth.* It was Greek in origin, and though it became the capital of the Roman Empire it remained in fact more Greek than Roman, and the Greek influence in the Roman work in the Balkan States may perhaps be traced to this origin. At about this

* *General Sketch*: E. A. Freeman, p. 99.

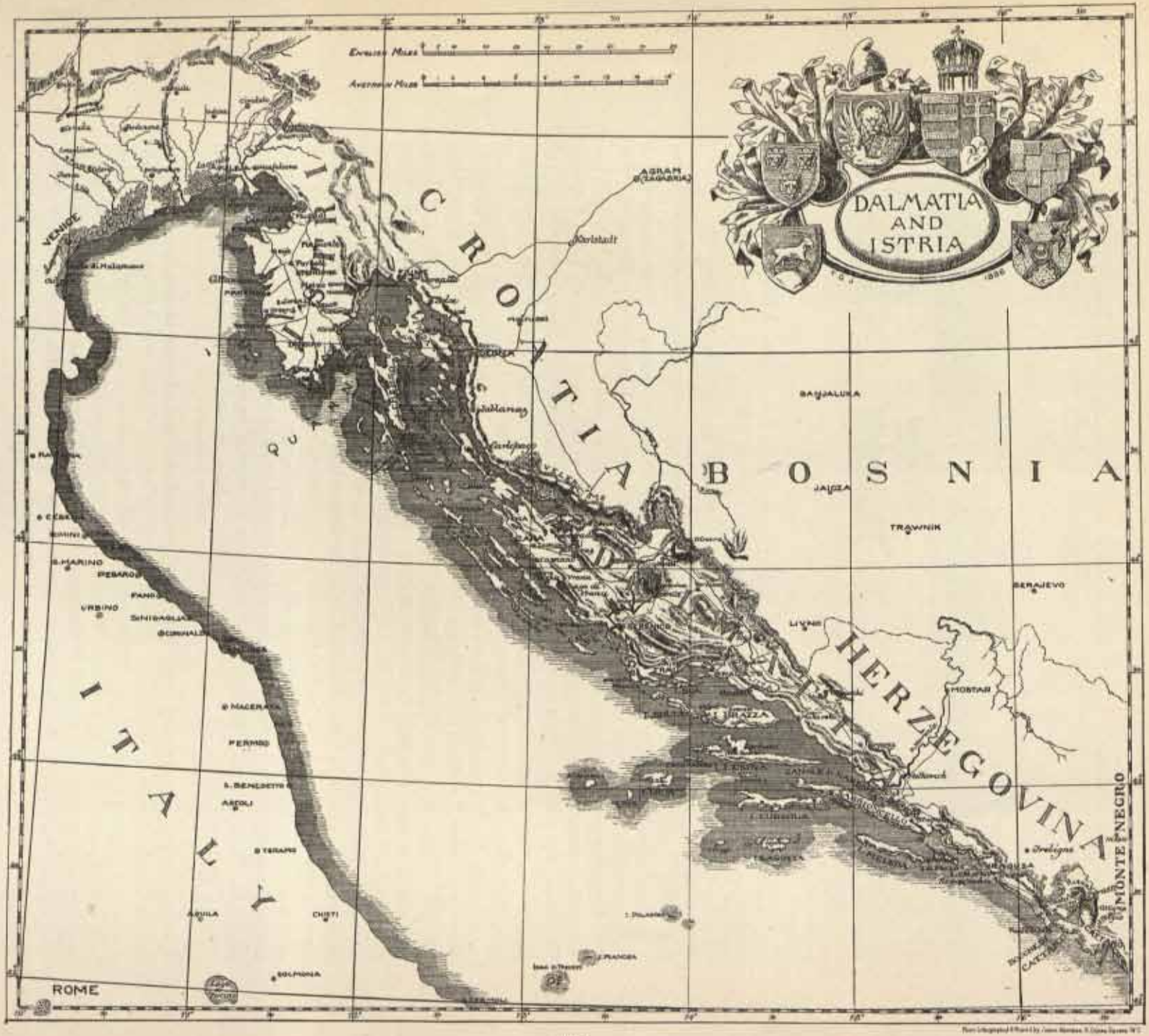


FIG. 1.

From *Dalmatia, the Quarnero, and Istria*: T. G. Jackson [Oxford, Clarendon Press, 1887].

period the Huns, who were being driven out of China, pressed upon the Goths, a Teutonic race, who had formed a kingdom in Dacia, a province north of the Danube. The Goths in turn took up arms against the Romans in 378. They did not, however, settle in the land they first conquered, but passed on westward, and no Teutonic kingdom was founded in the East. The Huns, however, continued to press onwards, and it was only under the united powers of the Romans, Goths, and Franks that they were defeated at Châlons in 451. This battle was perhaps the most important in all history. It was a struggle between the West and the East, between the Aryan race and the Turanian, between civilisation and barbarism.

The succession of Roman emperors came to an end in the West in 476 as the Teutonic inroads obtained the mastery; but the Roman emperors continued to rule at Constantinople, and the Roman sphere of influence was more nominal than actual on the west of the Adriatic. The Roman Empire was again united under that great building emperor Justinian, who reigned from 527 to 565. Under this emperor rose the Byzantine architecture, and one of the finest examples of the style may be seen at Parenzo. The Byzantine style flourished on the eastern side of the Adriatic until the great rising of the Avars, a race akin to the Huns. They were originally driven out of Central Asia by the growing power of the Turks; and in the year 639 they overran the province of Dalmatia and arrested all progress and civilisation for over two hundred years. The Byzantine work at the Duomo of Parenzo, built between 535–543, is an example of the splendid architecture in the time of Justinian. The Romanesque work at San Lorenzo in Pasenatico or at St. Dona at Zara are examples of the crude architecture that emerged when order and civilisation began to return after the Avars were vanquished. In the year 806 Charlemagne subdued the wild Avars and Slavs and extended his conquests over Dalmatia, Istria, and Croatia, but the maritime towns continued under the Eastern Empire. The Byzantines, in fact, remained masters of the sea, and the Franks imposed their rule on the Slavs in the rest of Dalmatia, Istria, and Croatia. This subjection to the Franks was, however, easily shaken off after the death of Charlemagne.

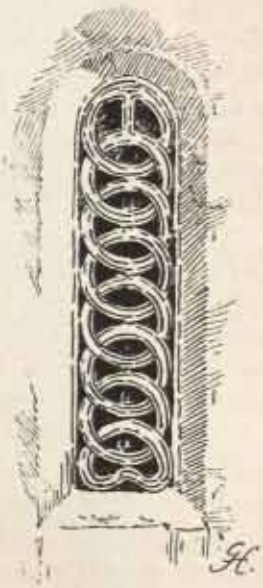


FIG. 2.—ROMANESQUE WINDOW, SAN LORENZO IN PASENATICO (8TH OR 9TH CENTURY).

Many of the coast towns are beautified by examples of Venetian architecture. The Venetians obtained their footing on the eastern side of the Adriatic after they had successfully contested with the Narentines for the supremacy of the Adriatic. The Narentines, according to Venetian historians, were little better than pirates, who levied blackmail on the commerce of the Adriatic and harassed many of the maritime towns of Dalmatia. Most of the maritime towns eagerly welcomed the Venetians as their deliverers, and the cities of Dalmatia offered their allegiance to the great Doge Pietro Orseolo II. and his successors on condition that he relieved them from the oppression of the Narentines. In the year 988 the Doge, after the Narentines were conquered, sailed down the Adriatic coast and received the homage of the bishops and people.

But in the middle of the thirteenth century a new power was growing, the Ottoman Turks, so called after their leader Othman, and their power has lasted till our own time. They hemmed in the Eastern Empire, and all was lost except Constantinople and a small territory around it. The Turks overran the Slavonic States, and their success was largely due to their taking a tribute of children from their Christian subjects. It was only at the beginning of the eighteenth century that the tribute of children was discontinued, and the Ottoman influence in consequence began to decline. This tribute of children always strengthened the master race and sapped the

life of the subject race. It is in the interior of the country that the Turkish work is to be seen, the coast towns having been strongly held by the Latin races before the advent of the Turks.

Short, incomplete, and slight as is this historical sketch, it may perhaps indicate some of the influences which have inspired most of the important buildings on the eastern side of the Adriatic. My chief authority is Mr. T. G. Jackson, from whose excellent work, *Dalmatia, the Quarnero, and Istria*, I have quoted my facts.

After leaving Trieste the traveller soon realises that he has left the West and that he is treading on the threshold of the East. The Slav races never seem to have amalgamated with the Latin settlers; the Serbs still wear their gorgeous costumes, and when I first visited these parts in 1884 every Serb was fully armed with knives and pistols (mostly flintlocks) in his belt.

I shall only refer to two or three of the many islands along the eastern coastline of the Adriatic.

The island of Veglia, which has scarcely yet emerged from mediævalism, has had a varied history. In the tenth century it was subject to the kings of Croatia, and in the twelfth century it fell to the Hungarian king Coloman. Later in the twelfth century it came under Venetian rule, and in 1133 it was ravaged by Croatian pirates, and its city walls and buildings destroyed. The inhabitants, however, with the aid of the Venetians, obtained a decisive victory on 9th March 1133, and to the present time this victory is celebrated annually. Its walls were rebuilt, and at the ancient Porta Pisana the winged lion of St. Mark stands above the site of the old gateway.

Within the walls of Veglia is the Duomo, a twelfth century building, Byzantine in the main, but with a very distinct flavouring of Romanesque. The columns, which are of irregular lengths, appear to have come from some older building. The capitals, as Mr. T. G. Jackson points out, were all made to fit these irregular columns, and the irregularity was adjusted in the abaci so that the springing of the arches should all be at one level. A thoroughly unsatisfactory attempt has been made to form geometrical figures between the intervals of the leaves in the capitals.

On the island of Arbe, as well as on the east coast towns, the winged lion of St. Mark held sway. The Venetian campanile, built about 1200, is a beautiful example. The tower, exclusive of the spire, is 90 feet high and 20 feet square at the base. There is a fine proportion in this campanile, and great skill has been shown in carrying up the work with increasing delicacy in each succeeding story of the tower.

On the mainland, going south from Trieste, is the picturesque town of Pirano. The town has no particular interest, though it is surrounded on the land side with picturesque city walls and towers. Some of the houses have pleasing bits of Venetian Gothic work in them. Before, however, touching that most interesting town of Parenzo it is worth while visiting San Lorenzo in Pasenatico about twelve miles inland. Not many travellers visit this out-of-the-way town, and as we entered through the ancient Venetian gateway of its mediæval walls, every inhabitant appeared to be transfixed with wonder that anybody even in his wildest moments should have dreamt of going to San Lorenzo. The dogs first realised the extraordinary apparition, and without a moment's hesitation they all came dashing at us from every quarter of the town. The women called off the dogs, for the men are not in the town during the daytime. When the noise subsided the children came to us, and never left until the priest took charge of us. The priest is the host in these primitive towns, and travellers should always make themselves known to him. He gave us wine when we were there in 1901, as he had given wine to Mr. T. G. Jackson in 1882; but I doubt whether there have been many visitors between these dates. San Lorenzo in Pasenatico in former times, in the fourteenth century, was the seat of the Venetian Governor of Istria, and the Venetian windows and galleries speak eloquently and pathetically of a vanished grandeur.

On one of the bastions of its city walls stands a Venetian campanile, and in the piazza opposite the church is a fine Venetian well-head, which I think the priest was anxious to sell for

the benefit of his poor parishioners. As, however, we were bicycling and the well-head weighed over a ton, we were compelled to banish the thought of possessing this fine example of Venetian Gothic work, which after all has an historical interest in the midst of its present surroundings, and would have little or none if removed.



FIG. 3.—HIGH ALTAR, PARENZO, FROM THE SOUTH AISLE.
From *The Shores of the Adriatic*: F. Hamilton Jackson [Lond., John Murray, 1908].

The perfect art of Byzantine architecture died in the onslaught of Avars and Slavs in the seventh century, and in San Lorenzo we find the return to civilisation in the eighth or ninth century after Charlemagne's conquest. This early example, like San Donato of Zara, is crude, deformed, and misshapen perhaps; but in it are the germs of the Romanesque style which grew

and flourished and survived longer on the eastern side of the Adriatic than anywhere else. So crude indeed is this church that the arches of the nave are actually of different heights. The capitals look like debased Roman work, but bear a Byzantine character with the large impost blocks. One window in the apse of the south aisle is purely Romanesque in appearance [fig. 2, p. 431]. This window (which was never glazed) is covered with a rough tracery of interlacing circles. To those who take an interest in the development of architecture, this primitive window will appeal with particular force. Here is a window of the eighth or ninth century covered with tracery—little can the carver have thought, as he chiselled out this tracery, of the glory of that treatment in subsequent Gothic architecture.

It is now interesting to compare this crude work of the eighth or ninth century with the marvellous refinement of the Duomo of Parenzo. The Duomo of Parenzo, according to Mr. T. G. Jackson, can be shown by documentary evidence to have been built between 535 and 543. It is as fine as Sant' Apollinare in Classe at Ravenna or Santa Fosca at Torcello, and in the completeness of its plan with its atrium and baptistery it surpasses them. This beautiful example of a Byzantine basilica of the first period has fortunately been spared to us almost wholly in its



FIG. 4.—ROMAN AMPHITHEATRE, POLA.

original state. In 1881 it was necessary to lay a new floor, for the Duomo stands on a low peninsula which gradually, through the ages, is sinking into the sea. As the sea washed over the floor a new floor was laid 12 inches above the old one. When I saw this church in 1901 the custodian showed me the old floor, and he also showed me a still earlier floor at a depth of 3 feet 9 inches below the present flooring. This lowest floor may be late Roman work—a floor, in fact, of a Roman building which stood on the site of the present church. To the west of the basilica is a square atrium, with a covered ambulatory around its four sides.

The capitals supporting the arches around the atrium are deeply cut, showing in fine relief the rich Byzantine tracery on their convex outline. In some cases the columns appear to have come from an earlier building, as they do not in all cases fit the capitals they support. To the west of the atrium is an octagonal baptistery, with a sinking in the floor where probably a marble-lined piscina previously existed. To the west again of the baptistery stands a fifteenth-century Venetian campanile.

The perfection of Byzantine art is realised in the interior of the Duomo. The episcopal throne is at the east end of the nave apse, and the marble seats for the clergy are placed right and left of the throne around the sweep of the apse, the ends of the seats being terminated by dolphins.

The chief glory of the east end is in the early Byzantine mosaics of the sixth century, which form a high dado above the seats of the clergy. To modern ideas the combination of materials that have been employed in this mosaic may seem incongruous. Burnt clay of a dull deep red colour, obscure glass, polished marbles, and flat oyster shells have all been employed ; but combined together they give such an effect as would be impossible of attainment in glass alone. The oyster shells still keep their gleaming pearly whiteness, and give peculiar emphasis to the design. The centres of the panels are sometimes polished slabs of porphyry. On the centre panel, over the episcopal throne, is a gold cross on a ground of serpentine and mother-of-pearl. Above this deep dado of panels the wall surface is entirely covered with mosaics, which are more in accord with our general appreciation of Byzantine mosaic ; but for real courage of design I do not know of any mosaic to equal the high dado above the marble seats.

The Byzantine capitals are superlatively fine ; but the great impost blocks appear at first sight rather redundant to a mind trained on Gothic lines. These impost blocks, or double capitals, came into vogue when the early Byzantine builders constructed their vaulting so that the load fell on to the capitals. To their minds the load may have appeared excessive for the capitals to bear, and possibly with the idea of distributing the load through a superimposed block on the capital it was hoped that the danger of crushing the capital would be avoided. The present high altar [fig. 3] was put up in 1277 by Bishop Otho, and the dentilated spandrils containing the mosaics are characteristic of Venetian Gothic work.* The columns and capitals are, however, of an earlier date.

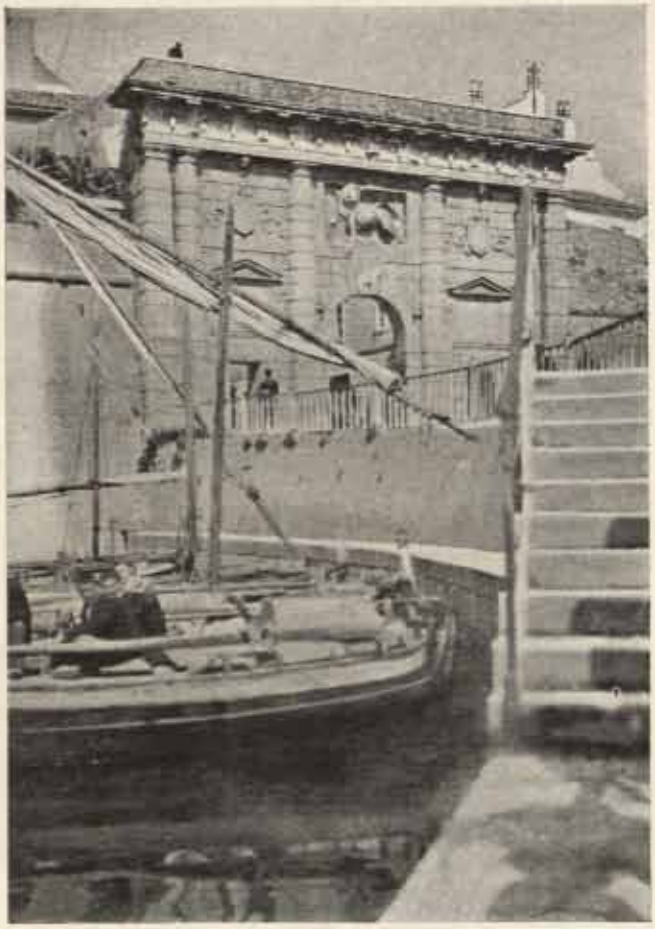


FIG. 3.—PORTA MARINA, ZARA.
From *Dalmatia*: Maude M. Holbach [Lond., John Lane, 1908].

Pola, which has now become the most important Austrian naval base, must have been a still more important Roman town. The shell of a great Roman amphitheatre [fig. 4] stands to-day outside the town as it stood in Roman days outside the city walls. It has been calculated by Dr. Kandler that the theatre would hold 21,000 spectators, besides 10,000 who might take part in the performances. These enormous numbers, Jackson says, "are of course quite disproportionate to the population even of Roman Pola, and prove that the shows and dramas were intended not only for the city but for the province." † This great elliptical hollow shell

* *The Shores of the Adriatic, the Austrian Side*, Hamilton Jackson, p. 116.

† *Dalmatia, the Quarnero, and Istria*, T. G. Jackson, vol. iii. p. 291.

now forms a mighty enclosure to grazing grounds. At the terminals of the long and short axes, projecting towers have been built. In the windows of these towers curious tracery exists, that is formed by piercing stone slabs and sometimes by the building in of square balusters. Besides the amphitheatre at Pola there is much Roman work. There is the Porta Gemina, beyond which again is a single Roman archway leading to the town. Within the town, however, stand two Roman temples. Originally they were exactly alike. These temples, one of which is still perfect, are perhaps as fine examples of Roman work as any extant.

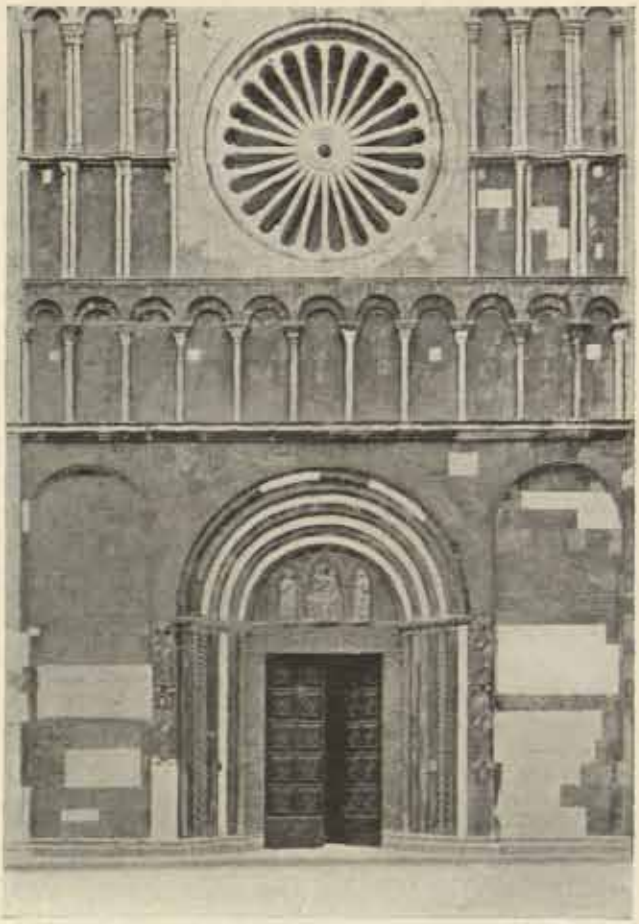


FIG. 6.—FAÇADE OF DUOMO AT ZARA.
From *Dalmatia* : Maude M. Holbach [Lond., John Lane, 1908].

The town of Zara is approached through the Porta Marina [fig. 5], a Venetian structure with the great lion of St. Mark with his paw on the open book. Inside the town stands the ungainly circular church of San Donato. This, like San Lorenzo in Pasenatico, is an early example of returning civilisation at the beginning of the ninth century, after the lapse of some three centuries since the building of the beautiful Duomo at Parenzo. It is perhaps even more debased than San Lorenzo, and the debasement is due to the same cause. That mighty rush of Avars killed the Byzantine art, and the abortion San Donato is a monument testifying to the thoroughness of the onslaught.

San Donato is a round church of the same type as San Vitale at Ravenna, or the Cathedral of Aix-la-Chapelle. It has a circular space in the centre rising to the roof, and a two-storied circular aisle surrounds it. The amazing interest of this church is, however, revealed in its foundations. The earth over a portion of the interior has been excavated to a depth of perhaps four feet, and the foundations exposed. Here, lying in a perfectly promiscuous manner, are great blocks of Roman entablatures, the drums of marble columns, and classic fragments. Jackson well remarks of these fine classic remains buried in the foundations that they "seem to have been trodden underfoot with an ascetic scorn for the meretricious splendour of pagan rites and pagan temples, and with sublime irony to have been made to carry the simple piers and coarse masonry of the Christian church." *

The Cathedral of Zara was not probably begun before the thirteenth century. It is basilican

* *Dalmatia, the Quarnero, and Istria*, T. G. Jackson, vol. i. p. 259.

in plan, and it is perhaps curious that this plan should be so long continued in Dalmatia after it had been given up on the other side of the Adriatic. This Romanesque building, with its arcaded west front, is considered by Fergusson to be superior to San Michele or San Martino at Lucca, or the Cathedral at Pistoja or Sta. Maria at Arezzo. Its simple west porch [fig. 6], with its members of the arch truly corresponding with the shafts, is very correct in detail. Romanesque architecture in Dalmatia long continued as its national style after the rest of Europe had developed into Gothic. The west front of Zara Cathedral was built in 1324, or 150 years after the transition from Romanesque to Gothic in France and England.

Another fine example is St. Grisogono with its external arcaded apse and delicate colonnade. It is very doubtful whether anything finer of its kind could be found among the Lombard churches of Italy. Its date is 1175. The west front dates probably from the beginning of the fifteenth century.

The Cathedral of Sebenico is perhaps unique in its construction, for throughout the building neither brick nor wood has been used. As Jackson says, "Indeed not only Italy but Europe may be challenged to show another church of this size in which neither timber nor brick is employed, everything being constructed of good squared stone, marble, or metal." This is no idle challenge ; the walls and roof are all of stone, neither timber nor tiles are employed anywhere in its construction. If stone walls are sufficient protection against the elements it is difficult to see why the stone vaulting should not likewise suffice. I am of opinion that the honesty of this construction has much to commend it. It may be taken as an accepted canon in art that the construction of a building should be the basis of the design. To conceal the construction is an attempt to deceive the mind, and the more the cloak of deception is enriched the further the mind is carried from the true appreciation of the construction of the building. Now in the Duomo of Sebenico the whole construction of the roof over the nave, aisles, and tower is equally apparent, whether viewed from the interior or the exterior of the building. In our Gothic work the whole construction of the vaulting is externally concealed from view by the timber and tiled roofs, but it is interesting to



FIG. 7.—WEST DOORWAY OF THE DUOMO AT SEBENICO.
From *Dalmatia* : Maude M. Holbach [Lond., John Lane, 1908]

speculate as to how the upper surface of the vaulting would have been treated by the Gothic builders had they adopted the form of construction employed in the Duomo at Sebenico.

From Jackson's most interesting description a detailed account is given of the architects who were engaged and the exact dates when the several parts were built.

Very shortly, it appears that the west end and nave were designed by one Master Antonio, and were built between 1431 and 1441, when Antonio apparently was dismissed, and Master Giorgio Orsini, of Venice, was engaged to complete the work. Antonio's work is purely Italian Gothic, but the Renaissance rage which arrested the development of Gothic architecture came in during the period of the building of this church. The transition took place after Antonio was dismissed, and before Giorgio was engaged. In the work of this latter architect the Renaissance influence is clearly to be seen.*

The Venetian Gothic porch, with its Lombardic lions supported on *quasi* classic consoles, is a very fine example of Gothic work of Antonio, but the Renaissance cornice of the parapet marks the change in style introduced by Giorgio of Venice. In the town are many Venetian Gothic windows, and at least one external marble staircase in which the balusters and ends of the steps are beautifully carved.

Traü is the next town further south of marked importance, and the Duomo of Traü is a building of the first importance. The city of Traü now stands on an island, and the island is approached over a wooden bridge. It is a walled city which practically covers the sland on which it stands. A Venetian gateway with the guarding lion of Venice is carved over the arch [fig. 8], as at the Porta Marina at Zara and many other towns in Dalmatia. Outside the gateway all carriages must stop, for the network of narrow roads, only about four or five feet wide, make wheel traffic impossible. Its narrow roads are often spanned by arches and beautified by rich Venetian galleries and Venetian Gothic windows. These sunless little roads we found most delightfully cool after the heat of the shadeless road by which we had travelled on our bicycles. The only open space in the town is the Piazza del Duomo, on the south of the cathedral. The south side of the cathedral forms one side of the square, and opposite to this is the Venetian Loggia; at the ends of the square are situated the Palazzo Communale and the Palazzo Cippico. Mr. Jackson's drawing of a capital from the Loggia shows a very fine example of Venetian Gothic work.

The building of the cathedral was begun about 1200, and various parts of the structure bear dates as the work proceeded. The body of the church was completed in 1440, very nearly 250 years after its commencement. The tower, however, was not completed till 1598, as is recorded by an inscription, though the lower portion of the tower bears the date 1421. The church is purely Romanesque. It has a basilican plan with a large and beautiful porch at the west end. This porch is perhaps the most perfect and beautiful example of any Romanesque work that exists. Dalmatia seems to have been little influenced by Western Europe, for in Dalmatia they went on developing the round arched style long after the Gothic pointed arch had become established elsewhere in Europe. This long continuance of the round-arched Romanesque gave an opportunity of perfecting this style which culminates in the porch of the Cathedral of Traü. In the carved work of this beautiful Galilee porch or narthex there is an extraordinary wealth of Romanesque imaginings, and the whole is finished with marvellous perfection of execution. On either side of the west doorway are great archaic lions, standing on classic consoles; they project out boldly at a height of perhaps six feet from the ground. They support brackets on which Adam stands on the south and Eve on the north. These figures are nude and life-size, and they have some of the imperfections of the

* Jackson, *op. cit.* p. 381, et seq.

period when they were executed. They look very much ashamed of themselves in contrast to the bold and impressive beasts below them. The hunting of the deer amidst the intertwining trunks and foliage forms a charming and interesting shaft next to the plain moulding of the doorway. In the interior, the octagonal pulpit and high altar at the east end probably belong to the fifteenth century, though they would certainly be taken as belonging to a much earlier date if they were to be found on the west of the Adriatic.

To continue the journey southward, the city of Spalato or the palace of Diocletian is reached. Professor Freeman has rightly pointed out that "By the banks of the Tiber the city of Romulus became the house of a single man; by the shores of the Adriatic the house of a single man became a city."* Diocletian did in fact when building his house build a city. The building covers an area of 9½ acres of land; but it is not only the great scale on which the palace was laid out, nor the completeness of its appointments, nor its general magnificence, it is rather the originality in its detail and the striking development in its construction that single this building out from all others as exerting a greater influence upon subsequent styles, either Romanesque or Gothic, than any other building in the whole history of architecture.

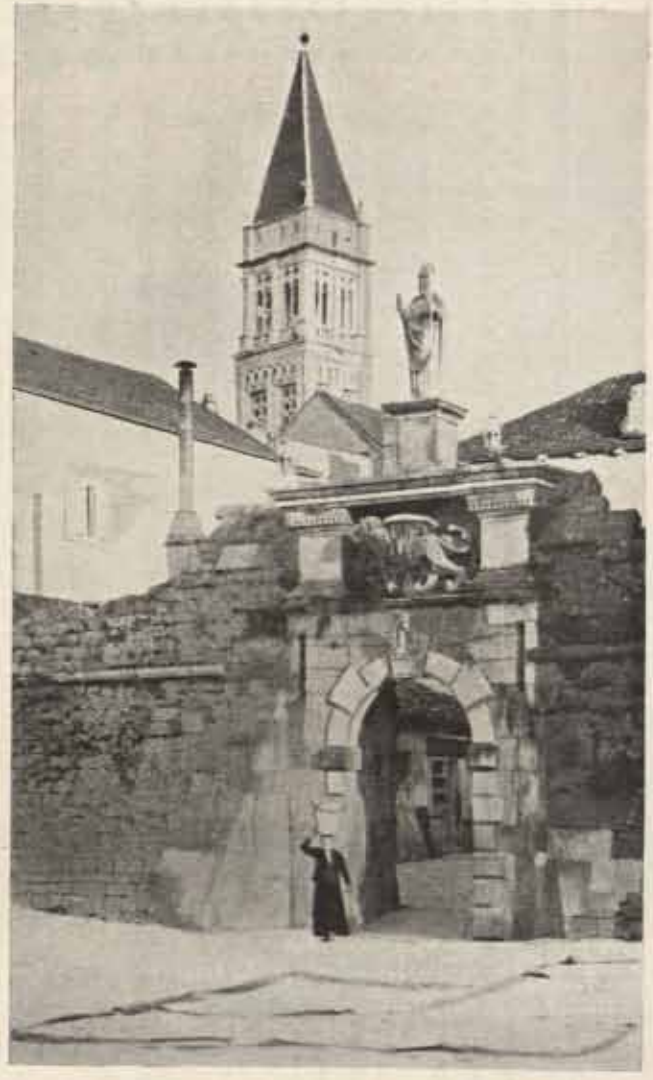


FIG. 8.—A GATE OF TRAÜ, WITH CAMPANILE IN BACKGROUND.
From *Dalmatia*: Maude M. Holbach [Lond., John Lane, 1908].

The palace is worthy of the man. Diocletian, born in the year 254 of slave parents on the eastern side of the Adriatic, rose to be master of the world, and with him ended the control of Rome over the eastern part of the Adriatic. He abdicated at the age of fifty-nine, and retired to the land of his birth, where he built his palace. So ruined is the palace that, in order to give any idea of its ancient magnificence, I propose illustrating my remarks from Adam's monumental work published in 1764. From the plan [fig. 9] it will be seen that it is a rectangular building, and on the north, east, and west the external walls are defended by square and octagonal towers; while on the south front, towards the sea, is what Adam calls the great cryptoporticus, having a frontage of over 500 feet. From this gallery, or cryptoporticus, some of the royal apartments could be entered. The royal apartments were to

* *Subject and Neighbourlands of Venice*, Prof. E. A. Freeman, p. 141.

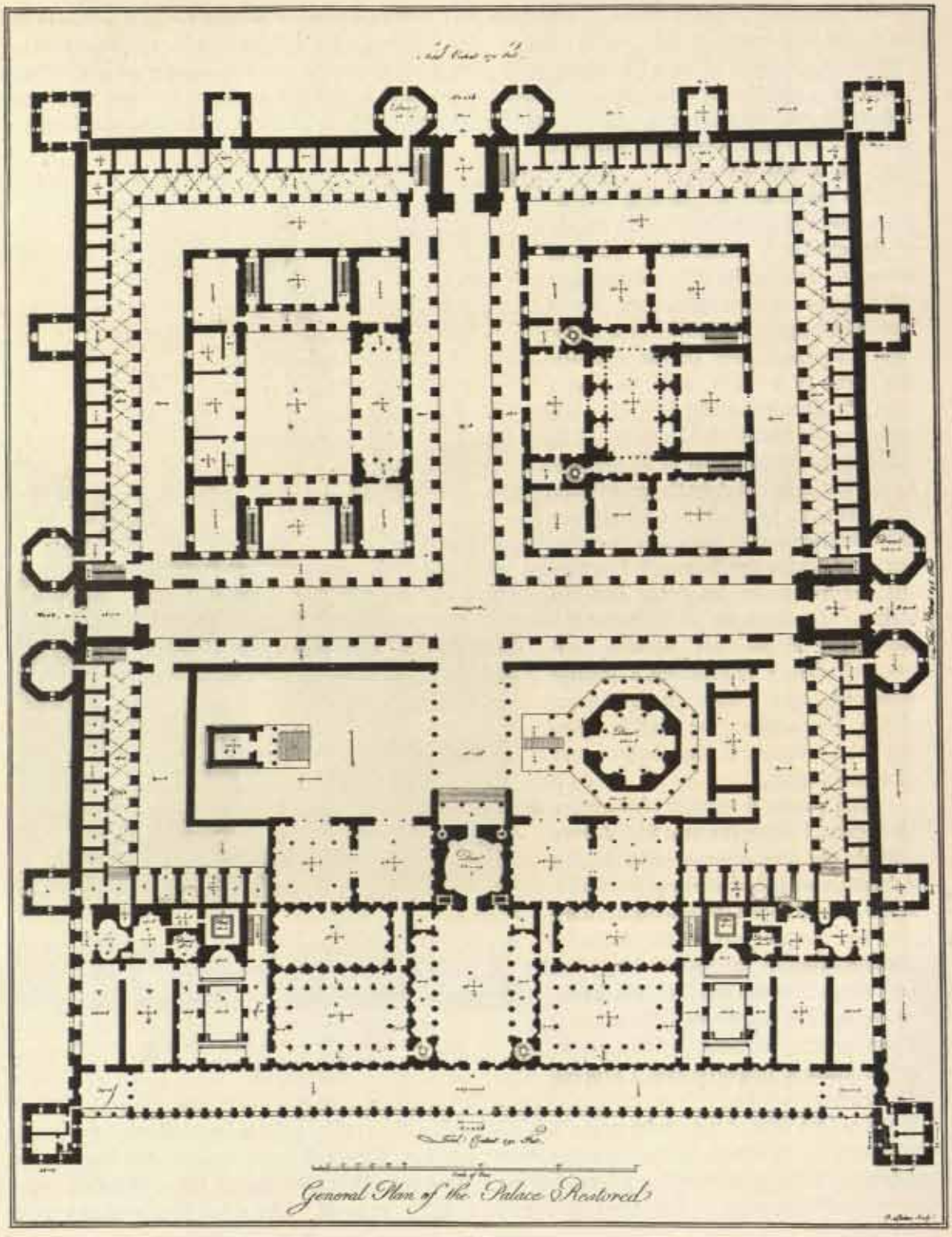


FIG. 9.—THE PALACE OF DIOCLETIAN AT SPALATO: PLAN AS RESTORED BY ROBERT ADAM, 1764.

the south, and were flanked on the west and east by an elaborate system of baths. The octagonal building in the south-east section is called by Adam the "Temple of Jupiter," but it is suggested by Dr. Arthur Evans that Diocletian intended the edifice to be his mausoleum. The building is now, however, converted into the Cathedral of Spalato. The small temple in the south-west section was referred to by Adam as the "Temple of Æsculapius." According to Adam, possibly the block of buildings in the north-west section was for women, and the block in the north-east for courtiers. Probably the cubicles around the external walls were for soldiers. The principal entrance was on the north, which is still called by the ancient name

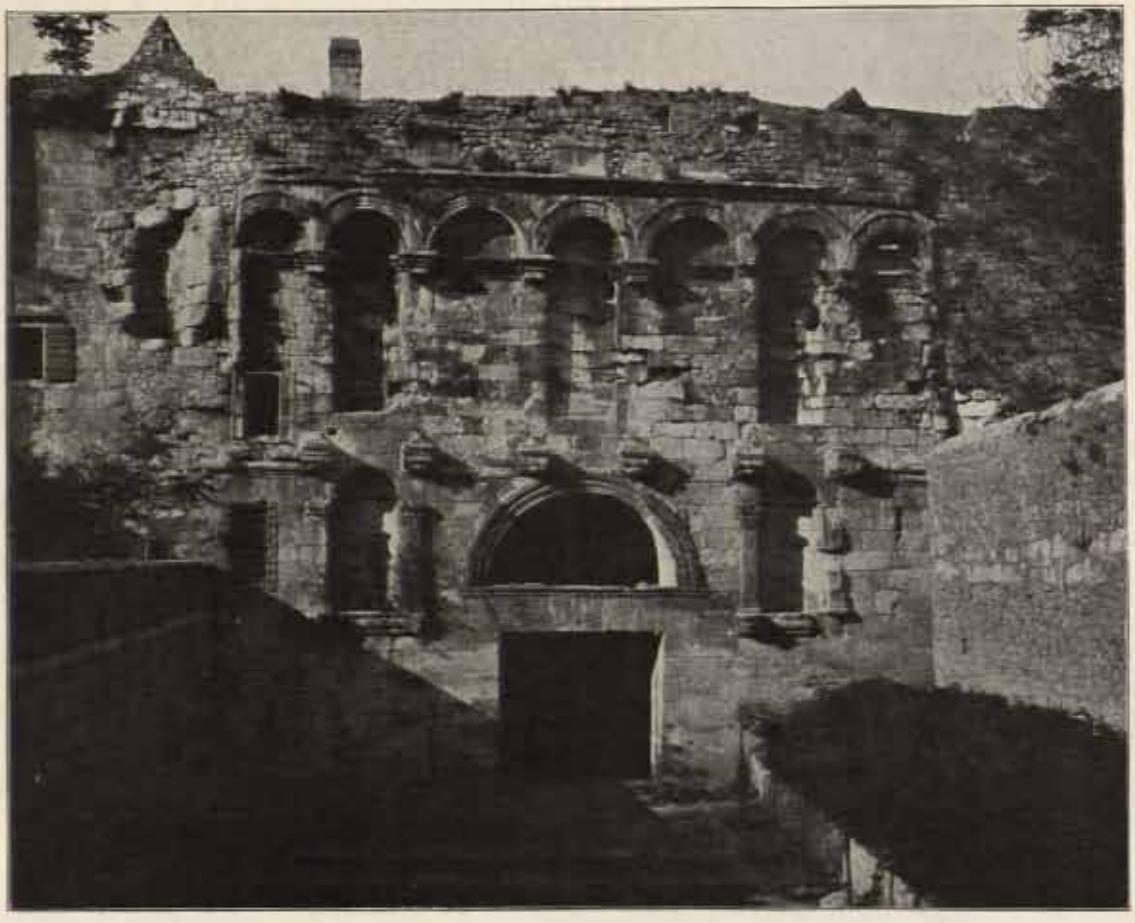


FIG. 10.—PORTA AUREA, SPALATO.

"Porta Aurea" or Golden Gate [fig. 10]. The east gate was the "Porta Ænea" or Bronze Gate, and the west gate "Porta Ferrea" or Iron Gate.

In the illustrations shown of this Roman palace it will be seen that there is a very marked tendency to depart from the accepted Classic standards, and on this account the palace may not appeal to those who can only admire purity of style; but I submit that when those departures from the accepted standards have had an influence on all subsequent architecture, then the building commands our particular attention. None of the buildings attained any great height, as may be seen from the sections. Though much remains, it cannot, I think, be accepted

that Adam's plans and sections are entirely reliable; no doubt they were to a certain extent conjectural.

At the entrances provision was made for the raising and lowering of a portcullis. The grooves in the jambs are clearly defined, and the hole in the staging above the archway shows where the chain passed when raising and lowering the portcullis. I had always been under the impression that the portcullis was a mediæval device until I saw it at Diocletian's palace. At the north gate,



FIG. 11.—PALACE OF DIOCLETIAN AT SPALATO: THE PERISTYLE.
From Robert Adam's *Palace of Diocletian at Spalato* [Lond. 1764].

the Porta Aurea [fig. 10], it is apparent that the arcaded feature has a Romanesque rather than a Classic appearance.

If we walk in at the Porta Aurea and pass along the main thoroughfare through the palace, we soon arrive opposite the portico to the Vestibule. The feature of the arch spanning the space between the central columns, and the arches which span the openings from capital to capital of the columns in the peristyle, all mark a striking departure from true Classic rules.

The columns are of Oriental granite, and the entablatures and capitals of statuary marble. The Vestibule was approached by a handsome doorway from the portico. The Vestibule, according to Adam, who obtains his authority from Ovid, "was a sacred place, consecrated to the gods, particularly Vesta, from whom it derives its name." The Vestibule was a domed building, with a central opening in the dome to admit light, as at the Pantheon at Rome. Beyond the

Vestibule to the south stood the atrium or great hall, probably dedicated to the ancestors. From the atrium the cryptoporticus could be approached. The appearance of the cryptoporticus is much spoilt by the houses which have been built between the arches, and the shops

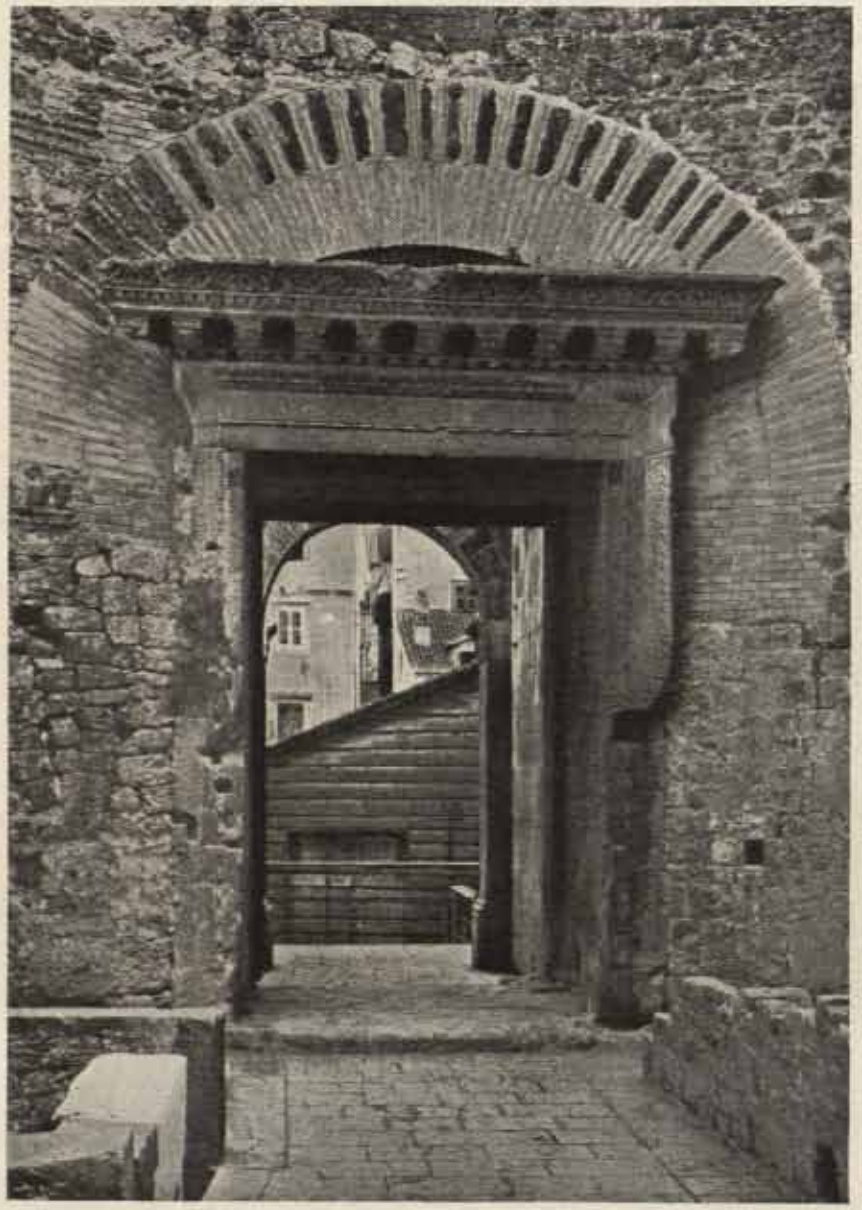


FIG. 12.—DOOR OF THE ATRIO ROTONDO, PALACE OF DIOCLETIAN, SPALATO.
From *The Shores of the Adriatic*: T. Hamilton Jackson [Lond., John Murray, 1908].

which have been formed by the lower portion of the wall; but in Diocletian's time it must have been a magnificent façade to the sea.

The "Temple of Æsculapius" is a small tetrastyle prostyle, the chief feature of which now remaining is the doorway [fig. 13]. The running, tendril-like enrichment of the architrave, with little winged angels, seems scarcely appropriate to the pagan Emperor Diocletian, but in it is

the same motive of design that we saw in the porch at Traü. The construction of the barrel roof is very similar to that unique building the Duomo of Sebenico. The mausoleum, now the Cathedral of Spalato, has at the entrance a magnificent mediæval campanile, which was encased in massive scaffolding when Jackson saw it in 1882, was encased when I saw it first in 1884, and was still encased when I saw it in 1901 and 1902. Work proceeds slowly in Dalmatia; but the Dalmatians generally manage to complete whatever they begin.

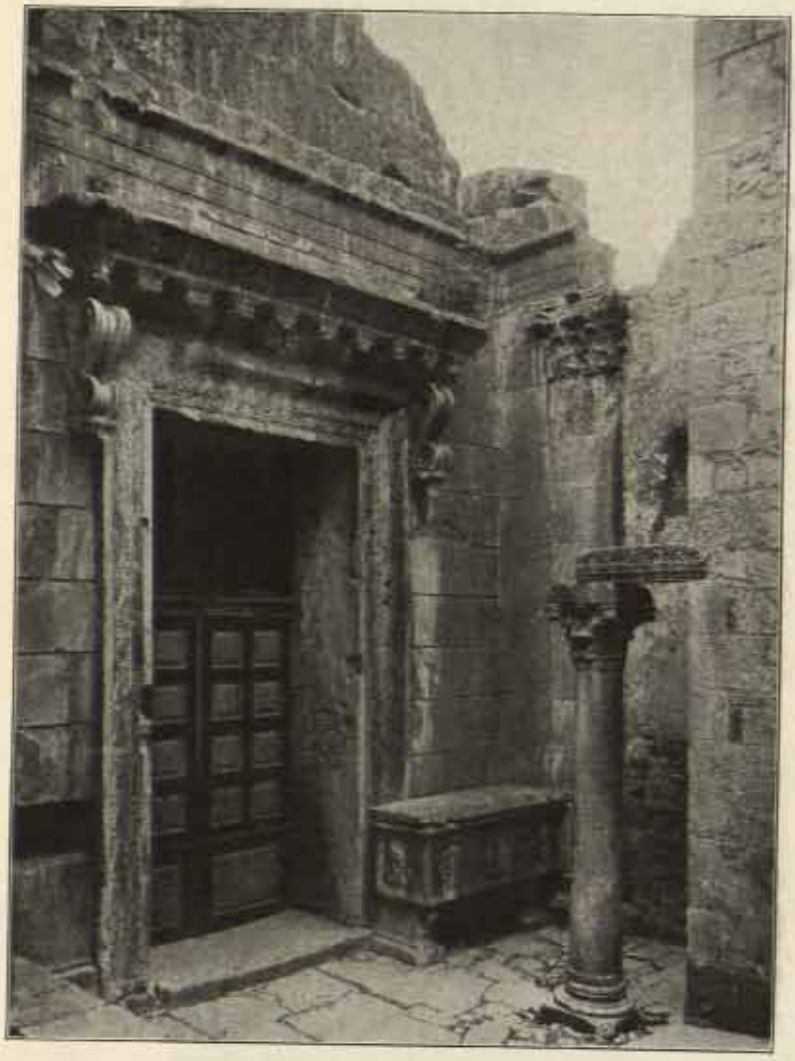


FIG. 13.—DOORWAY IN TEMPLE OF ÆSCULAPIUS, SPALATO.

The thirteenth century pulpit is a superlatively fine specimen of Romanesque work. It is hexagonal in form, and made of various coloured marbles and compact limestone. The proportion of the respective parts in relation to the whole is admirable. It is indeed very doubtful whether any finer work of the period exists in any country; the detail is beautiful, and rich in the symbolism of that earnest Romanesque period [fig. 14].

The campanile is built without any foundation. The old steps and platform in front of the mausoleum were accepted as strong enough to support a massive campanile standing 160 feet above the level of the platform. Perhaps all would have been well for these confident mediæval builders if they had not cut through the platform to form two staircases; but as things are, there are ominous signs of the campanile giving way, hence the scaffolding which has hidden the view of the structure for so many years. The dome over the mausoleum has a curious fan-shaped construction. It is formed of tiles which bear the stamp "S. P. Q. R." (Senatus Populusque Romanus). Not in Rome itself is a palace of such proportions to be found, and perhaps nowhere in the world did one man ever build such a stupendous edifice for his own occupation.

In their standard work, *Architecture of Greece and Rome*, Messrs. Anderson and Spiers point out the four striking departures from true Classic style that occur in Diocletian's palace, and they show that in no case do these departures make their first appearance here. The decadent features are :—

1. The arch over a wide central intercolumniation (as in the Portico to the Vestibule) dates back to 151 A.D., being found in the Propylæa at Damascus and in the Temple of Atil.

2. Capitals carrying an arch without intervening entablature (as in the Peristyle) are found at Pompeii.

3. Columns carried on corbels (as above the Porta Aurea) existed in the Thermæ of Titus built in the first century A.D.

4. The accentuation of the Roman relieving arch over a lintel by enriching it with mouldings (as in the Porta Aurea) is found in the second century in Asia Minor and Syria.

The same authorities say that these departures are "the four leading features of the decadence in Roman architectural forms, and they are certainly exhibited in the palace at Spalato in a more striking manner than in any other building."*

When the great flood of Avars swept over the country in 639, the inhabitants fled from the Capital of Salona, and took refuge in the islands. At a later date they left the islands and took up their abode in the deserted palace of Diocletian. The walls of the palace became the city walls, and from that time onwards the palace has been the centre of a town. Water was carried by an aqueduct from Clissa to the palace.



FIG. 14.—ROMANESQUE PULPIT IN THE DUOMO AT SPALATO.
From *Dalmatia*: Maude M. Holbach [Lond., John Lane, 1908].

Salona, when it fell before the rush of Avars, was a mighty city, surrounded by a wall in which traces of eighty-eight towers have been found. At one of the city entrances three arches stood, the centre one for vehicular traffic and the side ones for pedestrians. The paved roadway here, as at Pompeii, shows worn ruts some 6 inches deep. Within the ancient walls is a great amphitheatre and the remains of a curious Christian basilica. A vast number of stone sarcophagi were being unearthed by Professor Bulić when I was there. Many were inscribed, but all had been rifled by the Avars. On the rocky side of the hill tombs had been cut, and entrances to them were gained by raising stone doors which ran in slots in the jambs. Inside the chambers were stone shelves on which could still be seen the bones of those Christians who must have been buried in the seventh century, or earlier. Two extremely fine early Byzantine capitals now in the

* *Architecture of Greece and Rome*: Anderson and Spiers, pp. 258, 259.

museum at Spalato came from the early basilica. As we left Salona we noticed great numbers of classic fragments built in the walls at the side of the dusty road by which we journeyed to the beautiful town of Ragusa. Ragusa, unlike the other coast towns, maintained itself as an independent commonwealth, though, according to Freeman, it did at different times have a dependent relationship to the dominion of the Venetian or the Turk; but it never was actually incorporated with either of them. The Lion of St. Mark is not to be seen here. The massive walls which surrounded this independent commonwealth force the traveller to realise the life-long sturdy courage of those early settlers. These settlers were Greeks who had from a very early time lived at Epitaurum, now Ragusa Vecchia. When the Avars swooped down on them the Epitaurians fled to the rocky coast and founded there the present town of Ragusa. Here



FIG. 15.—CITY WALLS OF RAGUSA WITH MINCETA TOWERS.
From *Dalmatia*: Maude M. Holbach [Lond., John Lane, 1908].

they surrounded themselves with the massive walls which climb the mountain side. They are stupendous, their very magnitude conveys the impression of impregnability.

Great towers stud the circling mighty walls which crown the verge of an inaccessible precipice. The town is approached over a drawbridge, and as we entered, a woman came up to us holding out a letter which she asked us to read and translate for her. It was in English and from a sailor who had in a blunt, matter-of-fact way written to the woman to say that her husband had been drowned. Perhaps we broke the sad news more gently than the sailor had attempted to do. The letter was an old one, and, unconsciously, she had been keeping the sad news till she had found some one who could translate it. The most interesting building in Ragusa is the Palace of the Rector of the Ragusan Commonwealth [fig. 16], and its history is one of the most complex that I know; this complexity has been most cleverly unravelled by Jackson, and those who wish to know more about it should read his account.* The difficulty which at first presents itself is that the

* *Dalmatia, the Quarnero and Istria*, vol. ii.

upper portion, above the arcaded portico, is in Gothic work of the date 1435, and the portico which stands below it is Renaissance, and, contrary to the proper order of things, is of a later date. The date of the portico is in fact 1464, which was thus built twenty-nine years after the upper portion of the building.

Shortly, the history is that on this site stood originally a fort or castle which was pulled down, and the Rector's Palace was built on the site in 1388. The Ragusans kept their powder magazines close to this building, and during a fire which occurred on 10th August 1435, the magazine exploded and the palace was wrecked. The palace was thereupon rebuilt in that year 1435, and one Master Onofrio Giordani di la Cava, of Naples, was engaged to carry out the work. The Ragusans were slow to learn by experience, for they put their magazine as close to

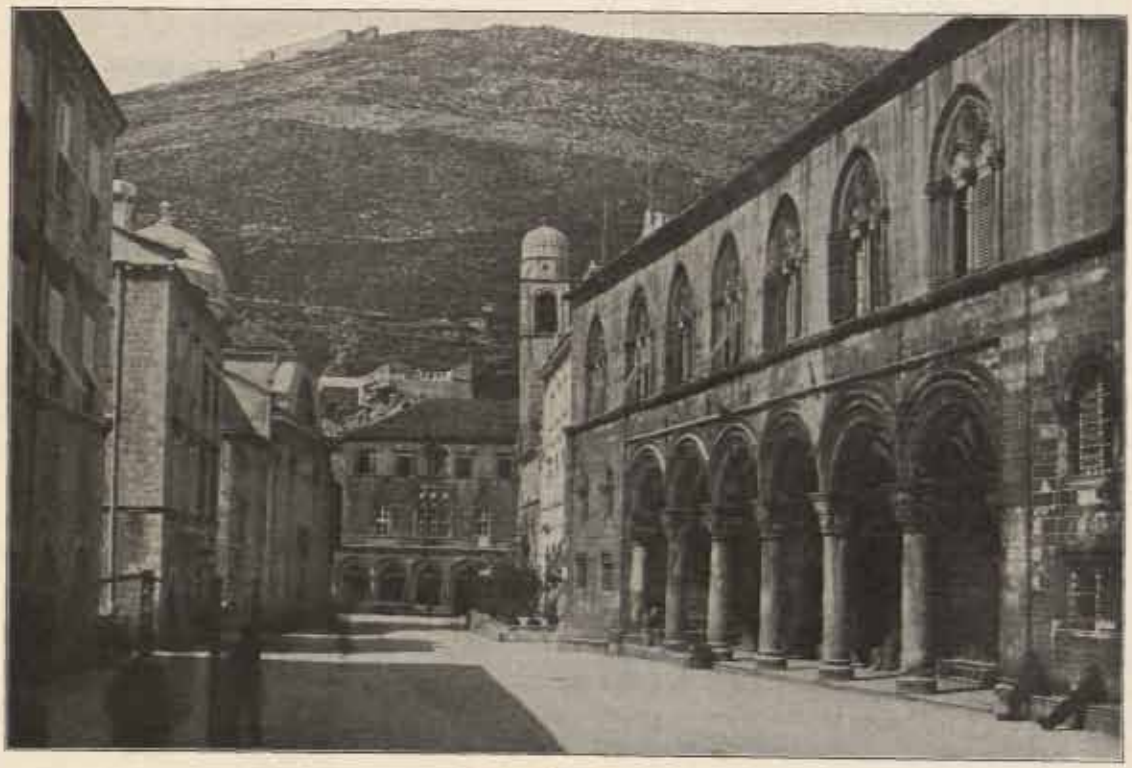


FIG. 16.—RECTOR'S PALACE, RAGUSA.

their new Rector's Palace as before. And as before a fire broke out. This fire occurred on 8th August 1462, and the palace was much damaged by the explosion. It became necessary to pull down the ruin; but as the upper portion was only partially damaged it was determined to use again the Gothic windows. Two architects were employed by the Grand Council to carry out the work. One was Michelozzo Michelozzi, a pupil of Donatello, and he was considered, after Brunelleschi, to be the most able architect of the early classic Renaissance style. The other architect was Giorgio Orsini, of Venice, of whom we heard at Sebenico, where he completed the cathedral in the Renaissance style. Now the original arcading to the portico of the 1435 palace had pointed arches, and these two Renaissance architects determined to put in round arches in the 1464 palace; they used some of the old capitals, and I think all the old columns; but in order to make up the necessary height, when they adopted round arches instead of the taller old pointed arches, they inserted deep abaci. The old Gothic windows were reinstated

in the upper floor. This is the explanation of the anomaly in this building, where the upper portion appears to be older than the lower portion. This outlying independent State of Ragusa continued to build in the primitive Romanesque style till a later date than anywhere else, even in Dalmatia. The consequence is that there is a temptation to assign a far earlier date to the buildings than the facts allow. The Dominican Convent, by Fra Stefano, was erected about the year 1424, but judging by its style it might quite well be the work of the eleventh or twelfth century.

It is not only the architecture of this coast-line which is so interesting, there is a wild charm about the Balkan States which is extremely fascinating. On that wild and uncertain borderland between Montenegro and Albania is the ancient site of Doclea. Here stood a Roman town, and the Roman walls still stand surrounding the ruins of the ancient city. There is the ruined Roman

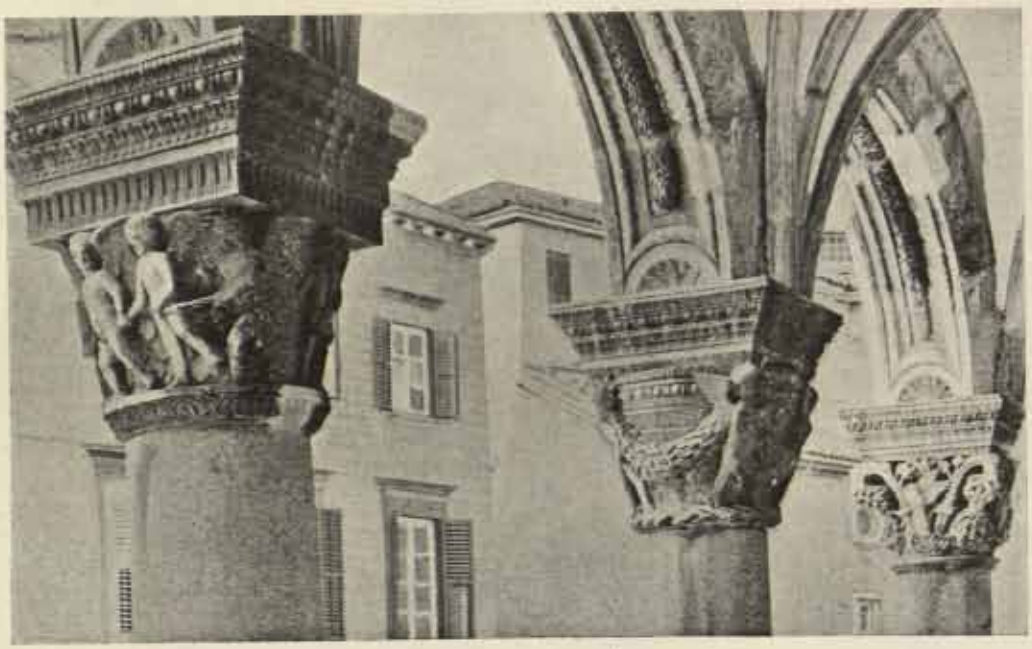


FIG. 17.—CAPITALS OF THE LOGGIA, RECTOR'S PALACE, RAGUSA.
From *Dalmatia*: Maude M. Holbach [Lond., John Lane, 1908].

forum, and massive pieces of carved entablature lie scattered on the ground. It is a deserted spot, overgrown with thorny brambles. I remember sitting there in the evening on a heap of ruined masonry; not a soul was in sight, and not a sound to be heard but the humming of the winged insects, and the scratching, grating noise of the tortoises as their horny shells rubbed against the brambles and Roman masonry. Scraping away the soil at my feet, just below the surface I came upon a Roman tesselated pavement. Darkness was coming on, and I returned to Podgoritza, which was full of Albanians and Montenegrins in all the gorgeousness of their national costumes. In the hotel the talk was the talk of wild, primitive men—of revenge and blood feuds. Blood was the only subject of conversation besides the excitement of a marriage in the town. It appeared that a Montenegrin had married a Turkish damsel from over the border in Albania. Not only was the Greek priest who had married them to be murdered, but the unfortunate young couple were to meet the same fate. Few experiences stand out more clearly in my mind than the night I went off with my Montenegrin host of the hotel to see the cottage where the young people were housed. As we walked along the quiet road during the night I noticed a cave at the

side of the road, and the dying embers of a fire inside the cave gave a subdued, glowing light. My curiosity tempted me to look in, and I was immediately greeted with a howl like that of a wild beast. My host explained that the occupant of the cave was a madman, and that he had lived there for many years. Shortly afterwards a man, armed to the teeth, stood across our way, and demanded to know our business. My host explained, and we proceeded. We were challenged in this manner on several occasions, and finally we arrived at the cottage. To defend the young couple from the doom that was certain to come sooner or later, every opening was barricaded, and a chain of armed Montenegrins lay around the cottage. The sound of a rifle shot in the distance brought every one of these lithe, alert Montenegrins to his feet. They determined that it was not one of their outposts who had fired; but they concluded it must be somebody—and I forget who the somebody was—who was being shot. There had been a little cattle raiding, somebody had stolen a cow, and primitive justice was being administered. It is a wild country, and an absorbingly interesting one; but it has not been the Turk or the Serb who has left the lasting memorials on the eastern side of the Adriatic; it has been the Latin races, and the descendants of the Latin races, who have been the great builders, and their works should be seen to be more fully appreciated.

I cannot close without paying my humble tribute of admiration and thanks to our Royal Gold Medallist, Mr. T. G. Jackson, R.A. He has been the pioneer through Istria and Dalmatia, and no man has contributed so largely as he to the sum of knowledge of the architecture of those provinces. I have taken the liberty of quoting very freely from his three most interesting volumes, *Dalmatia, the Quarnero, and Istria*; and by his kind permission slides from several of his beautiful drawings have been made to illustrate my paper. I am indeed grateful to him for so kindly allowing the exhibition this evening of his beautiful and unique pictures of the Balkan States. My thanks are also due to Dr. Frances May Dickinson Berry for her kind permission to reproduce some of the many photographs she has taken in the Balkan States.

And, lastly, I have to thank Mr. Hamilton Jackson and Mr. and Mrs. Holbach, and their respective publishers, for their kindness in allowing me to have reproductions made from the excellent photographs in their interesting books *The Shores of the Adriatic: the Austrian Side*; and *Dalmatia, the Land where the East meets the West.*

DISCUSSION OF MR. HUBBARD'S PAPER.

Mr. A. W. S. Cross, M.A.Cantab., *Vice-President*, in the Chair.

The CHAIRMAN said he felt that the thanks of the Meeting were due to Mr. Hubbard for his very scholarly and interesting Paper. In the adjoining room would be found a very fine and unique collection of costumes from the country upon whose architecture Mr. Hubbard had just enlightened them. Such an able Paper deserved an able discussion, and he was pleased to tell the Meeting that one of the greatest, perhaps the greatest living authority on Dalmatian architecture was present with them, and had kindly consented to open the discussion. He need hardly say that he alluded to Mr. T. G. Jackson.

Mr. T. G. JACKSON, R.A., said he was sure he was expressing the feeling of everybody in the room when he said with what pleasure they had listened to Mr. Hubbard's complete and exhaustive Paper. He (Mr. Jackson) knew Dalmatia perhaps better than any other country except his own, and it had been extremely interesting to him to hear Mr. Hubbard's account of it. It was now twenty-eight years since he first saw Dalmatia, and in that time no doubt things had altered a great deal. There were more steamers and more railways—there was but one little railway in his time, which was not joined on to any other—and travellers were probably not now exposed to the difficulties he had had to contend with in getting from one place to another. The only means of getting about among the islands was

by sailing-boats unless the traveller wished to stay a week on an island with the chance, only the chance, of a steamer calling to pick him up. There were now, he believed, Cook's Tours through Dalmatia, but he could not imagine that it would ever be a tourists' country. There was a good road from end to end, and Mr. Hubbard probably had experienced no difficulty in bicycling, but if one left the main road he did not think there was another on which a bicycle could travel. The country roads were atrocious, nothing but tracks over stony heaths, and if the traveller wandered from the path he would get his boots cut to pieces by the sharp rocks with which the whole country was strewn. He could not imagine its ever becoming an agreeable resort for merely pleasure tourists. However, with the greater number of people who visit it one could hardly help feeling some apprehension that the country would lose its primitive simplicity, in which state he had been fortunate enough to see it. When he went there first there was nothing that could be called a guide-book. The only book he could get was a little book by Schatzmayer, published at Trieste, which gave certain statistical accounts of the country, but touched very little upon anything else. There was, of course, Sir Gardiner Wilkinson's interesting book, but that did not deal very much with art. There were also those interesting and lively chapters by Professor Freeman upon some of the principal buildings, but Professor Freeman's interest ceased with the eleventh century, and his account gave no idea of what could be found after that date. There was also Professor Eitelberger's book, which went more thoroughly into it, and which was the best authority in those days for the mediæval remains and objects of interest of the country, but he did not go everywhere and was not altogether accurate. Therefore to some extent he (Mr. Jackson) had had the country a good deal to himself, at all events for the later monuments, and had had to discover for himself first what there was to be seen, and secondly the history of it. He used to sally forth perhaps in a little sailing-boat and visit some island without the least idea what was to be seen there, and except in one instance, he believed, he was never disappointed in finding things of the very highest interest. There was also the history of the country to understand, and that was very difficult. There was no history of Dalmatia so far as he knew in existence, except the very early books of the old Dalmatian historians. The history had to be hunted out in the Byzantine Greek of Porphyrogenitus and the Latin of the Dalmatian historians, which, although not of very great classical merit, at all events had the advantage of being clear and explicit. There were also the Italian writers on the subject, who were generally local historians, and the mediæval French of Geffroi de Villehardouin, and lastly, what was worst of all to him, the German. The history, when one arrived at it, was very curious indeed and very interesting. It was really dual; the history of the towns and that of the country was quite distinct. In the principal towns on the East Coast there still remained the old Latin culture. The towns themselves were to this day interesting survivals of the old municipalities of the later Roman Empire, which had never altered their character. They talked Latin, until it passed into Italian, which they talked still as their mother tongue in the towns. Outside the towns the country was peopled by Slavs, who for the most part talked nothing but Croat or Serb. In the towns the people had naturally to be bilingual; most of them could talk both languages, although there was a very strong feeling almost of hatred between the two sections, the Latin stock striving to maintain the old Latin culture, while the Slavs, influenced a good deal by the Austrian Government, tried to Slavonise the towns themselves as well as the country. That was the key to the politics of Dalmatia through the whole of the Middle Ages, and to some extent the key to the policy and the political difficulties of the country to this day. The history of the towns through the Middle Ages was something like that of the great Commonwealths of Lombardy and Central Italy. Each town had its own territory, its own government, its own laws; they made treaties with one another and warred with one another without very much reference to the supreme authority, although they were always subject more or less directly either to Hungary or to Venice, and there was a constant struggle between these two powers for the possession of the country all through the Middle Ages. Whether it was a Byzantine Prior, a Venetian Count, or an Hungarian Ban who was their nominal ruler, they had such an independence that they could deal with one another almost as independent States. They made war with one another and made treaties with very little reference to the supreme authority, although they were never able to throw it off in the way the great Lombard League did in the twelfth century, when by the Peace of Constance they obtained the recognition of their liberties from the Empire. So that the history of every town had to be studied separately, and to get at that he found almost in every place that there was some local gentleman who had devoted himself to the study of the history of his country, who had dived into the archives, which as a rule were very well preserved and very exhaustive, and who either in manuscript or in print had something like a connected history of his own town. The Dalmatians travel very little. Communication had always been difficult, and it was very rare for a Dalmatian of the northern part of the country ever to have been to Ragusa, for instance, or for a Ragusan to have gone to Traü or Zara. Therefore they had what was very interesting—that strong patriotic feeling of citizenship which was found also in the

great towns of Italy, that spirit which made the Florentines of the thirteenth century tell their architect, Arnolfo, to build a cathedral which was to surpass the cathedral of every other town. So in Dalmatia one found that the people from first to last had always struggled with a spirit of rivalry to surpass their neighbours. Mr. Hubbard had told them of one place that he (Mr. Jackson) was sorry to say he could not go to see, the old Diocleа where Diocletian was born. He wished Mr. Hubbard could have shown them a photograph of the walls and what remains there were. He did not know that there was so much to be seen there as Mr. Hubbard seemed to have found. There were one or two points of interest he might mention. One was the tracery on that little window at San Lorenzo in Pasenatico made of pierced stone. It was curious that there was in the old Saxon church of Barnack in Northamptonshire an almost precisely similar window of pierced stone. He had forgotten whether it was exactly the same pattern, but they were so much alike that one could almost imagine they came from the same church. At Grado there were windows originally, of which one remained, although not in its original place, a larger window about 3 feet across, made of the same sort of interlacing tracery. That was of concrete, not cut in stone, and no doubt it had been glazed, as he should think the window at San Lorenzo had probably been. Another thing he should like to mention was the extraordinary wealth of the whole province in the treasuries of the churches. Almost every treasury was full of the most lovely embroideries, Church vestments and cloths and different pieces of Church furniture. There was also silversmith's work, such as chalices, some of them most beautifully enamelled. Particularly, there was the pastoral staff of the Archbishop of Zara, a drawing of which was on the walls; it was most original, and he had never seen anything quite like it elsewhere. There was another something like it at Lesina, representing in the middle the Virgin being crowned by a curious sort of archangel who looked like a little chessman. Behind the Virgin was Moses bearing a scroll with the words "*Caput serpentis conteretur.*" The Virgin was standing, in pursuance of that text, on the head of the serpent, and Moses had put off his shoes because it was holy ground. On the top there was a little figure of Christ with the twelve Apostles; down the sides were the different Prophets, below that were the Patriarchs, below that again the four Evangelists, and below that again were little engravings of the six days of Creation. It was in itself a small Bible. Most of those pieces of silversmith's work were of Venetian origin; some of them in the South bore the mark of Ragusa. Among the latter was a very remarkable chalice with two angels attached to it—the angels had lost the little wings that fitted on their shoulders—which was strongly influenced by Venetian art. There was a great deal of silversmith's work in Zara. Of the great silver ark of S. Simeone there was a copy in the South Kensington Museum; the name of the maker, Francesco of Milan, was upon it; and in one or two cases he found some German plate, but most of it no doubt was of Italian origin. There was also on the wall a drawing of some Slavonic plate from a Greek convent in the Bocche di Cattaro which at the first glance would be thought to be Byzantine work. They were all dated by the Slavonic calendar according to the Slavonic era, which dates from the foundation of the world. It had been difficult to find out what the real date was, but a clue had been found which proved them all to be seventeenth-century work, although they were so archaic that one might well imagine them to be of the seventh or eighth century. The Slav architecture was very humble. The churches were extremely small; the cathedral of Nona had a dome of eight feet seven inches in diameter and a total length of twenty-five feet, and the cathedral church at Cettinge in Montenegro, where the Vladika was crowned, would, he thought, go inside their Meeting-room. Their architecture was really nothing. There were Slav artists, but he believed they were all naturalised in the cities of the coast; they became Latinised and produced very fine work. The portico at Traü, which was the finest in the country, bore the name of an architect which sounded very like Slavonic. So that the art of the country really came from the Latin or Latinised population of the cities. The only fine church in the interior, so far as he knew—he had not seen it himself, it would be difficult to get there now without having one's throat cut—was at Deshanj, which was in Old Servia, and that was built by Italian architects.

Mr. R. PHENÉ SPIERS, F.S.A. [*F.*], in seconding the vote of thanks, said that Mr. Hubbard's Paper had been of the greatest possible interest. Its range, however, was so great that he found it difficult to refer to more than one subject, and that subject he wished to dwell upon in order to correct (as Mr. Hubbard himself had already done to a certain extent) an erroneous impression which seemed to have gained ground. The first statement was when he referred to the building of the Diocletian Palace thus: "But it is the originality in its detail and the striking development in its construction that singles this building out from all others as exerting a greater influence upon subsequent styles, either Romanesque or Gothic, than any other building in the whole history of architecture." Freeman pronounced it to be "the greatest step ever taken, the beginning of all later forms of arched architecture, Romanesque, Gothic, or any other." Freeman was not, of course, acquainted with the discoveries which had been made during the last forty years in the East, and amongst other works that of the Comte de Vogüé, which

entirely upsets all those theories. These later publications had shown that it was really in the East that all these changes began, and it was Oriental influence which originated the Palace of Diocletian. Strzygowski, the great authority on the subject, had written a work, *Orient oder Rom*, in which he proved that nearly all the new features found in these later Roman buildings were derived from the East. He even claimed that the plan and design of this Palace of Diocletian at Spalato was based upon that of the city of Antioch; that the arrangement of the towers was the same as at Antioch; and he was certain that an architect from that city must have come over to superintend or to give some advice about the design of the Palace. Of course that was entirely another view on the subject, and one upon which he (Mr. Spiers) desired to lay stress. There were four characteristic features in the Palace of Diocletian which were different from those found in Roman architecture. The first three of these were mentioned by Mr. Hubbard, but the fourth was not, and he would take that first. It would have been noticed probably that in the view which Mr. Hubbard showed from Adam's work of the Golden Gateway, the relieving arch was accentuated and accepted as a feature, and was moulded like an architrave. The Romans constantly employed the relieving arch over the lintels of doorways, but never emphasised or decorated it. This treatment at Spalato was the earliest in Europe, but in the second century of our era and in Syria there was an example which showed that arch even more strongly developed. At Kefr Birim was a synagogue of the second century, of which he had brought down a photograph. The second feature was the arch resting direct on the capital. It was Choisy who first upset that theory, because he pointed out that at Pompeii there was an arch resting on a capital, and he gave an illustration of it on page 514 of his work. In that case the capital was of the Doric Order. If in Pompeii an early instance of it was found, it was certain that it must have occurred at other times during the Empire. The third feature was the carrying of the arches over the detached columns of the Porta Aurea. Mr. Hubbard was quite right in stating that at the Baths of Titus there were brackets carrying columns as a feature of decoration which was subsequently employed in the Thermæ of the later Roman Emperors. Mr. Hubbard was also right in saying that, compared with Rome, the carrying of arches on the top was an unusual feature. These, however, existed in Palestine dating from the second century, as in the temple at Quennonat. The niches at Mousmieh had arches carved on pilasters which were very much the same and suggested a similar idea, and there was also a niche at Chaqqa. He had brought a slide of the Prætorium at Mousmieh, which he would show presently if they would allow him. The fourth feature was perhaps the most important of all, and that was the carrying the arch across the central intercolumniation instead of the architrave. The drawing of Adam had been referred to as showing the earliest example, but examples of the second century existed at Damascus, and in two temples at Atil, and he was of opinion that the Propylæa and the Temples of Jupiter and Bacchus at Baalbec also had it on account of the greater width of the central intercolumniation. Of the existing example at Damascus he had brought down a photograph, and he had a slide of one of the two temples at Atil if they would like to see it. He thought it desirable to emphasise these points in order to correct the opinion generally received, and to show that as a matter of fact Oriental influence must be looked for in these features, and that it was Oriental influence which led to the great changes to which Mr. Hubbard had referred.

Mr. Spiers's slides were then shown upon the screen, and the points in question called attention to. The first slide showed Atil, which, he said, was the earliest dated instance he knew of, viz. 151 A.D., the inscription being on the base of the column. Consequently, it is 150 years earlier than the example Mr. Hubbard showed in the Palace of Diocletian at Spalato. The second slide was of another Syrian building, viz. the Prætorium at Mousmieh, which was built in the reign of Marcus Aurelius between the years 161 and 180 of our era, and in this case the arch was segmental.

DR. ARTHUR EVANS, F.R.S. [*H.A.*], who rose at the invitation of the Chairman, said that he had been in the past a good deal acquainted with Dalmatia, but that was nearly twenty-five years ago, and he had come rather to refresh his memory. One thing to be borne in mind was that the architecture was to a great extent dependent on the physical and geographical conditions of the country. The sea-coast of Dalmatia was admirably adapted for the development of commerce. It was sheltered to a great extent from the terrific N.E. wind of the interior, and lay on what was in prehistoric times the great line of intercourse between North and South, between Greece and Central Europe and the Far North. The result was the civilisation of the coast of Dalmatia began very early. In the eighth century Corinth sent out colonists in that direction at Corcyra, and then there was a new Corcyra planted on the Dalmatian coast. The tale was next taken up by the great Syracusan Emperor, as one might call him, Dionysius, who was a kind of forerunner of the Roman Emperors. One of the pivots of his policy was the establishment of a great chain of Adriatic posts. Thus we see that civilised life on the coast went back very early indeed. Relics had been found showing that it went back four or five centuries before Christ, although no great architectural remains of Greek origin had been

discovered. Then came the Roman Conquest. One thing to remember was that the inner culture of the Balkans, which was in the early times Macedonian, hardly touched the coast. The Macedonians conquered India before they really got a grip on what is now Albania. When Byzantium ceased to be an Adriatic power its influence ceased. The Slavo-Byzantine architecture of the Hinterland never touched the Dalmatian coast. Neither did the Turkish. On the other hand, the parallel ranges of the Dinaric Alps opened a comparatively convenient access from the north-west. The two forces that were thus perpetually contending on the Dalmatian coast were the maritime Adriatic element, and what is now represented by Hungary and part of Austria. This was what was running through the whole story that Mr. Hubbard had illustrated that evening. These two influences alternated. There was first the great hold of Rome. Rome, of course, to a certain extent, overrode the barriers of Nature, carried great roads into the interior, opened up the rich gold and other mines, and extended the true Dalmatia right away over Bosnia and Herzegovina; but when Rome passed away the interior relapsed pretty rapidly into barbarism. Only the cities of the coast held out. The great Palace Castle of Diocletian was interesting in one special way which had not been noted that evening: it was the last stronghold of the Western Empire at the time when the Western Empire had ceased elsewhere Julius Nepos, who was really the last Emperor, held out for a while within the walls of the Palace of Diocletian. Then took place the great Avar overthrow. It would be interesting to remember that the Chapel of St. Venantius in the Lateran was one of the last monuments of Roman Christian Dalmatia. Pope John IV. was a Dalmatian, and he seemed to have carried the Lares and Penates of Christian Dalmatia to a great extent across the Adriatic. This chapel was a sort of parallel to Sant' Apollinare at Ravenna. On its walls is to be seen the city of Salona in the aspect of the Heavenly Jerusalem. Just as the Bora, the most terrific wind in Europe, came up the Dalmatian valleys, alternating with the balmy south, so the northern influence had always penetrated. When the Carlovingian Emperors checked the Mongol invasion, overthrew the Avars, and subdued the Slavs, we see this influence beginning. No one had borne better witness to this persistent northern influence than Mr. Jackson, who had called attention to the continuous Hungarian influence on Dalmatia through a large part of the Middle Ages. The great church at Traü, for instance, with all its Adriatic details, showed in its plan a good deal of the influence of the Hungarian and South German churches. Then, again, there was the alternating influence of Venice, and Venice was so strong that Venetian influence to a great extent finally drowned the independent element in Dalmatian art. It drowned the native dialect of the Dalmatian, which, oddly enough, was not Venetian to begin with, but fitted on more closely to the dialect of Friuli, and was, in fact, a dialect which was in some respects hardly Italian. All these things, wind and weather and the lines of mountain ranges and islands, had to be taken count of in considering the successive phases of Dalmatian architecture.

MR. HUBBARD, having briefly responded, invited the Meeting, especially the ladies present, to inspect the native costumes and various examples of needlework, gold lace, arms and jewellery from the Balkan States, which Mr. Jackson and he had lent for the occasion, and which were displayed in an adjoining room.



The Lion of St. Mark on the column in the Piazetta, Venice, as restored by Cav. Boni. The hatched portion shows the original work.

TOWN PLANNING.

PAPERS COLLECTED BY THE R.I.B.A. TOWN PLANNING COMMITTEE.

XIV. EXTRACTS FROM THE TWENTY-FIRST ANNUAL REPORT OF THE CITY PARKS ASSOCIATION OF PHILADELPHIA.

In the Mayor's last Annual Report the proposed outer park system presented by the City Parks Association was adopted with a number of important additions.

This adoption is the signal triumph of the past year. The adoption of the plan has been accompanied by a series of ordinances acquiring parks big and little. The work of this administration in the matter of city parks deserves the highest commendation. Certainly no administration has given anything like the active support to the movement to further which the Association was formed, that has been given by the administration of Mayor Reyburn.

The Mayor has likewise adopted the policy of preparing for the city's future growth. He said in his report:—"All the larger municipalities of America are striving to raise the standard of municipal beauty and combine art with utility. To develop a highway here and there, to adopt this and that suggestion, no matter how good it may be, will ultimately lead to confusion and the resultant re-doing of what has been done. The process of civic development is of greater importance potentially than the administration of what the city has already acquired. I, therefore, earnestly recommend to your consideration the plans for the development of the city hereinafter outlined. Constructive work calls for more careful consideration and more skilled study of the probable growth of the city than mere administration. I have devoted much of my thought to the city's future and to the present necessity of preparing for that future. A comprehensive, broad, and general plan of civic development of elasticity to meet the varying conditions which may confront successive administrations should be developed."

With this need of the city for a comprehensive plan, with this competition among cities in the adoption of broad plans of civic development, with this strong endorsement by the city administration of the demand for such a plan, the City Parks Association of Philadelphia begs to recommend a definite scheme. It is as follows:—

Let $50,000 be appropriated for the expenses of a Commission to be composed of Daniel H. Burnham (the expert of the Chicago, Washington, San Francisco, and the Manila plan), Frederick Law Olmsted (landscape architect of the Washington, Seattle, Portland, and other plans), Messrs. Trumbauer, Zantzinger, and Cret (the three experts who prepared the plan for the Fairmount Park Parkway now adopted by ordinance as hereafter reported), George R. Stearns (Director of the Department of Public Works), and George S. Webster (Chief of the Bureau of Surveys).

Let the work assigned to this Commission be to prepare a plan for the systematic development of the region within twenty-five miles or more of the City Hall.

Let the report cover transportation, the street system, the river front, parks, playgrounds, civic centres, so that there shall result (1) the preservation of the system of two-story houses; (2) the creation of a greater commercial city; and (3) the beautification of the entire city and its suburbs.

THE FAIRMOUNT PARK PARKWAY.

We have referred to the Fairmount Park Parkway. It is a pleasure to report that the plan created by the Fairmount Park Art Association, and endorsed by your Association, was adopted by the Mayor in his annual message and definitely urged upon Councils, and that Councils have since that report ordered it to be placed upon the official city plan, which was done by the Bureau of Surveys on 20th September 1909. The recommendation of the Mayor, which has thus been carried out, is as follows:—

"The Fairmount Park Parkway is one of the greatest undertakings that require immediate consideration, and I cannot urge too strongly the importance of securing at the earliest possible date the revision of the lines of the Parkway so that it shall agree with the best thought and shall realise all the possibilities it presents.

"The necessity of providing an outlet for Fairmount Park and for the congestion around City Hall is self-evident. To produce the greatest economic value from the development of this section of the city, whereby the return to the city will be measured not only by the enhanced real estate values immediately adjacent thereto resulting in increased taxation, but whereby the whole city will be benefited, the undertaking must be along lines that will secure the highest class of structures. It is perfectly evident that this can only be accomplished by producing a great and beautiful avenue and controlling the character of the improvements. There has never occurred in this country, or possibly in Europe, so extraordinary an opportunity. A great City Hall is separated by barely a mile of fairly level and cheaply developed property from a great rock, an 'Acropolis' available for a municipal museum at the gateway of a famous park belonging to the city. The nucleus of a collection is waiting to be put in this museum. It would seem an ideal condition. Added to this, the city already owns a large strip of territory which would border the northern lines of this avenue and thereby insure

at once the ability of the city to attract monumental buildings of public or semi-public character.

"Beginning at the City Hall the character of the buildings around the City Hall Plaza suggests itself at once as being those which naturally are connected with the city government, such as the New Hall of Justice or Court House.

"The two blocks of 140-foot roadway between the City Hall Plaza and Logan Square will naturally tend to develop in a semi-commercial way, such as hotels, theatres, clubs, and high-class st res; this is apparent, owing to its proximity to Broad Street Station. It will be a short avenue, and somewhat similar to 'Unter den Linden.' There will begin at Logan Square and extend to Fairmount Plaza an avenue 250 feet wide, patterned after the Champs Elysées, with public and semi-public institutions, such as the Franklin Institute and the Public Library, grouped on the northern side, surrounded by ample parking space. Large private residences and apartment houses will probably be on the south side of the avenue in this section.

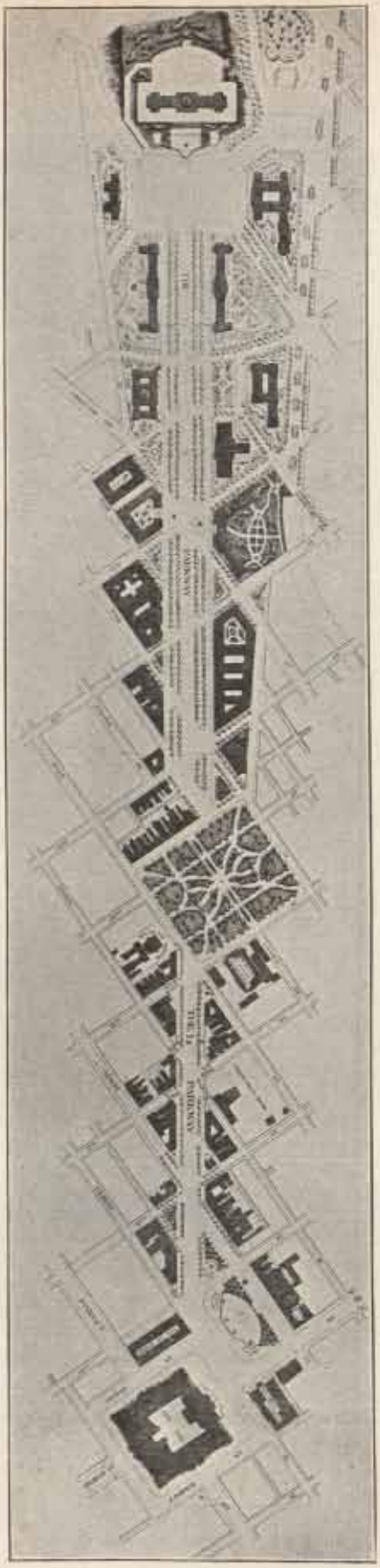
"Directly on the axis looking from City Hall Tower beyond the Fairmount Plaza and high above the avenue of trees will be seen the great golden dome of the Municipal Museum. Flanking and enclosing the great square may stand the Pennsylvania Academy of the Fine Arts, the Pennsylvania Museums and School of Industrial Arts, the Architectural Department of Public Education of the City of Philadelphia. These four great teaching institutions, surrounding the museum—the storehouse of the art treasures of the past, the inspiration of the future—would create a group that would command the attention and support of the entire country."

The following is quoted from the report of Director Stearns, of the Department of Public Works:—

"When this improvement is completed, it is confidently believed that this city will possess one of the most imposing thoroughfares in this country. The present conception is to have the parkway lined with beautiful structures, such as art galleries, museums of various kinds, technical and educational institutions, and possibly a municipal building to contain the Courts of Justice that are now housed in the City Hall.

"The history of all municipalities has proven the value of constructing parkways and wide boulevards. The money expenses for such purposes is always well invested, as beautiful avenues of this character bring in not only a splendid revenue but have a tendency to promote the artistic temperament of the community at large."

The adoption of the parkway plan, as recommended by the Mayor, is the chief event of the year in Philadelphia, and so far as official action is concerned is the chief event in the year's



PLAN OF THE PARKWAY: CITY HALL TO FAIRMOUNT PARK, PHILADELPHIA.



PLAN OF MUNICIPAL IMPROVEMENTS SUGGESTED FOR PHILADELPHIA.

municipal history of the United States so far as physical development is concerned.

. . . . . .

Second only in importance to the Fairmount Park Parkway is the improvement of the banks of the rivers—the Delaware to make it a great commercial way, and the Schuylkill a great pleasure and business thoroughfare. This has been recommended repeatedly in the past few years. During the last year it appeared in the thought of the city officials for the first time so far as public utterance was concerned. With knowledge of what has been done, however, we are glad to say that the matter is receiving, and has been continually receiving for some time, the constant attention of the Survey Bureau. The Mayor's report says :—"The work of widening and repaving Hunting Park Avenue will be prosecuted to completion in the early part of the year. If this Avenue was carried westward to Fairmount Park it would make a splendid driveway *viâ* the North-east Boulevard to Torresdale, and, taken in connection with the South Broad Street Boulevard, the proposed improvements of the Schuylkill River, and the parkway improvements, would result in giving Philadelphia a chain of driveways the equal of any city in the world."

Reference to the map will likewise show the diagonal avenues which the Mayor suggests. These must come in time. The parkway will blaze the way for them. In regard to these streets the Mayor said :—"The importance of the street system cannot be over-estimated. Upon it depends the facility of intercommunication between all sections of the city. With the growth of the population the congestion in the central portions tends to become greater and greater. In order to be prepared for this growth the means of transit from the outer circle of the city to the centre must be adequately increased. This can be done by diagonal thoroughfares. The plan that is submitted herewith shows proposed diagonal avenues from City Hall, the extension of Ridge Avenue and Passyunk Avenue to the vicinity of the water-front at Market Street, and an extension of Kensington Avenue down to Broad Street.

"It is obvious that these improvements cannot be carried out at once. They will have to be carried out in the future. Other cities place such streets upon their official city plan and open them from year to year as opportunity offers. In Paris many of the new streets have taken twenty years in their construction. One, two, or three blocks are opened each year. In this way the burden is distributed and is not felt, while the city meets the need of more streets owing to the growth of the population as that growth takes place.

"The mistake of previous engineers in not planning diagonal avenues should be avoided in outlying sections. For instance, the plan shows a suggested street crossing the eastern section of the city from Germantown to Richmond in place of the zigzag line that must be followed now. Further, the plan shows connections of certain of the parks by means of diagonal parkways."

In closing the Mayor recommends as follows :—

"I beg to recommend that the Bureau of Surveys be authorised and directed to follow the general plan outlined in the accompanying map, and I further recommend that parkways be placed upon the city plan and opened as the means of the city allow. In suburban districts I approve the policy of the Bureau of Surveys in laying out not only diagonal avenues, but in having the general system conform with the natural contour of the ground, making beautiful and attractive avenues. When diagonal avenues are introduced their intersections with the gridiron system of streets will form a number of opportunities for locating at such intersections the circular parks that make Washington so beautiful."

In this official recommendation of the plan for an outer park system, diagonal streets, and the preparation of a comprehensive scheme of civic development, there is contained the greatest promise for the future that the annual reports of this Association have ever been able to record.

XV. EXPLANATION OF THE BUILDING PLAN OF MARIENBERG.

[Translated from *Der Stadtbau*, No. 10, 1904.]

The principles on which the linear direction of streets was based is :—

1. *To aim at as many and as valuable building lots as possible*, for the whole building surface of a town is a large public and private fortune that once squandered by a badly designed plan is irretrievably lost. Therefore it is important that all building lots should have as much street frontage as possible ; that each should be of such a shape and size as experience has shown is advantageous for building on ; that, generally, different-sized building plots should be distributed, and at the periphery of the building land they may be larger, so that later on, in case of need, they could be divided up again, though on the whole more small building lots are advisable, because, if need be, a builder who wants more space can easily buy several such plots which are close to one another.

2. *To aim at good correspondence with the existing lines of intercommunication.*

3. *The designing of good intersections of streets.* This is a very important matter, which has been generally very much neglected by engineers and geometricians, who have frequently undertaken the drawing of plans without having had much experience of building. If the street lines are geometrically drawn with a rule in a pattern according to their assumed direction, frequently acute-angled junctions of streets, and therefore also acute-

angled corner houses result, for which it is not possible to make an economically satisfactory plan. The only way to avoid these acute intersections is by making curves or breaks in the side streets, so that they run into the main street at right angles. In building such cross streets difficulties are frequently met with which can only be got over by the formation of small squares. These small squares, so far from being a disadvantage, are an ornament to the town as a whole, an improvement in communication and orientation, and add considerably to the value of the surrounding building plots.

4. *The careful regard for the boundaries of landed property.* If plans designed with geometrical precision were given up and the street plan designer would draw his plans in conformity with existing property boundaries, it would remove many of the difficulties and obviate the necessity for compulsory measures (*vide* German redistribution laws.)

BLOCKS OF BUILDINGS.

The principles observed were:—

1. A regard for every possible means of using building ground profitably (from the financial point of view).

2. A regard for a certain amount of freedom in order to allow for the possible building requirements of the future.

3. Besides cutting up the building space into as long and narrow strips as possible (Olmutz System), larger building blocks may also be adopted, these proportionably distributed to the different building groundowners. This is indispensable, in the interests of free development in the future, in order to obtain larger "inside spaces" free from dust and noise, and larger building surfaces, in case they may be required for gardens, playgrounds, skating rinks, bicycling grounds, larger workshops, factories, baths, washhouses with drying grounds, &c. &c. Such "inside spaces" may provisionally be profitably and suitably surrounded by rows of houses with only two streets at least opening into them.

REVIEWS.

M. CHOISY'S VITRUVIUS.

Vitruve. By Auguste Choisy. 4 *vols.* 4*o. Paris*, 1910. *Price* 60 *francs.* [*Imprimerie Librairie Lahure*, 9 *rue de Fleurus, Paris.*]

This important work, to which the late Auguste Choisy devoted the last four years of his life, has just been published, and a copy has been sent to the Institute. As already mentioned in the JOURNAL [25 Sept. 1909] the first two volumes were printed off before his death and the other two had been corrected and passed by him for press. The first volume is a general analysis of the contents of Vitruvius' work *De Architectura libri decem.* The second and third contain the Latin text with Choisy's translation of it into French, side by side, to which have been added passages from other Latin authors, such as Pliny the Elder and Faventinus and Palladius, writers of the fourth century. The fourth and last volume contains Choisy's interpretation of the drawings, some of which are referred to by Vitruvius as constituting part of his work but which have never been found. Let us hope that when Herculaneum is excavated a complete copy may be one of the discoveries.

There have been so many translations of the text published since the fifteenth century, when the MS. was found, and in various languages, that it might be possible by comparison of one with the other to arrive at some general conclusion not far removed from the truth; but Choisy's intimate acquaintance with Roman architecture, his minute study of the methods of building employed by the Romans, and his practical knowledge as an engineer of the "Ponts et Chaussées" give him a greater claim to accuracy in his translation than any other writer on the subject. This is borne out by the analysis of the first volume, which is a general summary of the results arrived at by him after long and careful study of Vitruvius, and forms an exceptional work of its kind, which will be of the greatest value to students, accompanied as it is by the plates of the fourth volume illustrating his interpretation of Vitruvius' drawings. It has already been pointed out in the biographical notice that the last four years of Choisy's life were devoted to this subject, but the conclusions arrived at are those based on the minute study of more than fifty years of one who when barely out of his teens had showed a remarkable talent in independent researches. In the five great works already published, (1) *L'Art de bâtir chez les Romains* (1873), (2) *L'Art de bâtir chez les Byzantins* (1883), (3) *Etudes épigraphiques sur l'Architecture Grecque* (1883–1884), (4) *Histoire de l'Architecture* (1889), (5) *L'Art de bâtir chez les Egyptiens* (1904), Choisy would seem to have possessed the peculiar power of condensing into a single sentence that for which most writers require pages, and also of representing graphically with a line or two that for which draughtsmen would want elaborate diagrams; when we note, therefore, that the analysis alone contains 386 pages (as set forth in the prospectus) it becomes a hopeless task, without many weeks of study, to attempt to note properly the work just published.

The treatise of Vitruvius would seem to have been written as a guide for the architects, builders, and craftsmen of his day, who, it may be assumed, were fairly conversant with the materials in use and the ordinary methods of construction, and had probably a vague notion only of architectural design; it follows in consequence that there are gaps in his descriptions, and sometimes portions of the original text missing, and although at the present day our knowledge of construction is far ahead of that of Republican Rome, of that which existed when Vitruvius wrote his work we know but little. It is precisely

here that Choisy comes in and is able to fill up in his translation the various gaps in the original work, partly from the works of other authors, and partly from his own archæological researches. The additions made in the French translation are enclosed in brackets so as not to interfere with the original text; and where the original text is defective notes are entered at the bottom of the page, and sometimes with references to other authors.

It is, however, the analysis which will be regarded as Choisy's masterpiece, and it is only necessary to glance at the frequent references throughout to book and chapter in Vitruvius to recognise that the latter must have been a man of extraordinary accomplishment, not only as a scholar, architect, and engineer, but as possessing to a great degree that peculiar power of conciseness which is possessed by his translator. Where, however, Choisy's analysis is likely to be of more service to the student lies in its classification. It has always been a difficult task, even with an index, to find some of Vitruvius' statements, but Choisy, who knows his book or treatise by heart, brings the various references together. In page 7, for instance, two paragraphs of twelve lines explain clearly the kind of brick employed in Vitruvius' day—viz., unburnt or crude brick with the exceptional use of burnt brick or tile, and he gives as his authority three references to Books I., II., III., V., VII., and VIII., which show that Vitruvius' remarks on the same are spread through the treatise. A similar system is employed throughout Choisy's analysis, and although the statements are much more detailed than in Vitruvius, whose meaning has often to be explained, references to the original text are always given. In Vols. 1 and 2 of Choisy's work the complete translation of the text is given, which includes that of all the technical terms; in the analysis these are emphasised, which becomes of the greatest importance when dealing with the construction of walls, floors, and roofs, or with the description given by Vitruvius of the Orders, and those are all rendered more clear by the plates prepared to illustrate the analysis. The most valuable part of this will be that describing the Orders, which are in some cases widely different from those of Vignola and Palladio, who drew their interpretation from the remains of ancient Rome existing in their day, all dating from the Empire to the fourth century, and therefore quite unknown to Vitruvius. There is one trifling error which has crept into Choisy's description on page 172 of the Temple of Jupiter Olympius at Athens, the plan of which he infers was octastyle when Vitruvius wrote his treatise, but was *subsequently rebuilt on a decastyle plan*. If Choisy had read Penrose's Paper read at the Institute in 1888, in which he proved conclusively that the existing remains were those of an octastyle temple built in the central axis of the great enclosure of the temple, he would not have added this statement, which otherwise was not necessary to his text.

Choisy's great mathematical knowledge has enabled him to deal with calculations which are perhaps beyond the calibre of the ordinary student, such as those set forth by Penrose in his work on Athenian architecture; it is, however, this knowledge which has made it possible for Choisy to describe and illustrate the principal engines employed in warfare by the Romans; they are, of course, more archæological than architectural, but they would have been of the greatest possible interest to Napoleon III., who employed Viollet-le-Duc to make restorations of these machines, which are now located in the Museum of the Palace of St. Germain-en-Laye.

In his work, *Etudes épigraphiques sur l'Architecture Grecque*, where he translated the Greek specification found on a marble slab at the Piræus of the great arsenal there built, and gave a restoration of the building, Choisy showed himself to be a profound scholar in Greek. To this work of Vitruvius he adds a translation of a Latin inscription on a building erected at Pozzuoli about 105 B.C., and gives a restoration of the structure, which shows that he was equally proficient in Latin. The loss of a great author is never felt more than when he is taken away from us, and, had it not been for the unfortunate accident which befell him at Rheims and led subsequently to his death, we might have hoped that he would have been spared many years more to enlighten us on subjects of which he was the greatest master.

R. Phené Spiers [*F.*], F.S.A.

OLD ENGLISH MANOR HOUSES.

The Manor Houses of England. By P. H. Ditchfield, M.A., F.S.A. Illustrated by Sydney R. Jones. La. 8vo. Lond. 1910. *Price* 7*s.* 6*d. net; post free* 7*s.* 11*d.* [*B. T. Batsford, 94 High Holborn, W.C.*]

Mr. Ditchfield is well known as a writer of popular books with an antiquarian tendency, and in *The Manor Houses of England* he discourses in his fluent and pleasant way of the charming homes which survive in many of our villages. He purposely refrains from going profoundly or too technically into his subject, but he skims over its surface in a skilful manner. His method of treatment is good: he devotes a chapter to the manor itself, another to the evolution of the manor house, others to the materials of construction, exterior and interior details, metal-work, and gardens. The casual reader will be interested without being overwhelmed with a display of learning; the architect will have his interest sufficiently roused, it is hoped, to pursue the subject more fully, and in any case he will be highly pleased with the illustrations (by Mr. Sydney R. Jones), which comprise, for the main part, houses hitherto known to few.

Mr. Ditchfield is evidently acquainted with most of the recently published books bearing on this subject, and he has absorbed, apparently, some of the prejudices as well as the knowledge of the

writers. The disparagement of the larger Elizabethan houses, as contrasted with manor houses, the assumption of a general but unskilful use of German pattern-books by Elizabethan workmen, are hardly justified by a dispassionate review of the facts; while the idea, which one gathers by implication, that Northamptonshire examples have anything to do with the Cotswolds would be dispelled by a tour through those widely sundered districts. It may also be doubted whether the English squire of Tudor times, or indeed of any other, was the gifted and artistic person suggested. If he clung to traditional style, it was less from æsthetic motives than because the workmen he employed knew no other way. There are few things more clearly established than the fact that in all periods squires and others, when they came to building or altering their houses, hankered after the most modern fashions, and adopted them so far as their means and opportunities allowed.

It would be ungracious, as well as unnecessary, to follow the author through his chapters and argue every disputable point; but in the matter of chimneys he seems to share the prevailing misconception that the fireplace was the successor to the central hearth. In a way, of course, it was—that is to say, the central hearth was the earlier form, derived from ancient wooden buildings which may be likened to wigwams with an opening at the summit whence the smoke escaped. But wall fireplaces are found in early Norman keeps, where indeed they were essential, inasmuch as only the uppermost floor could have a vent in the roof, and central fireplaces were adopted in new houses as late as the reign of Henry VIII. For some four centuries, therefore, both forms were in use simultaneously.

Architectural readers, however, will be less concerned with such controversial points than with the straightforward information conveyed—with the gradual growth of the house, with the apt use of local materials, imparting an ever-varying interest as we move from county to county, and with the suggestive descriptions of the architectural details which enrich these old places both inside and out. Above all, he will be grateful for the illustrations, daintily drawn and conveying a vivid impression of the wonderful wealth of England in ancient houses of all styles and periods. There is this advantage in the scope of the book, that not being an architectural treatise, the finest and most striking examples are not necessary to give point to its lessons. We get, therefore, a number of those delightful ancient homes in which picturesque grouping and variety of treatment, rather than architectural detail, afford the chief interest, and all architects will be glad to make the acquaintance of so many fresh subjects. Mr. Batsford is to be congratulated on his latest contribution to our knowledge of domestic architecture in England.

J. A. Gotch, F.S.A. [*F.*].

BUILDINGS FOR FARMS AND SMALL HOLDINGS.

Handbook of Farm Buildings, Ponds, &c., and their Appurtenances. By Thomas Winder, Surveyor to the Duke of Norfolk's Yorkshire and Derbyshire Estates. With a Chapter on the Application of Electricity to Farming and Agriculture, by J. W. Beauchamp, Deputy Manager of the Sheffield Corporation Electric Supply Department. 8o. *Sheffield*, 1908. *Price* 6s. 6d. *net* [*Pawson & Brailsford, High Street and Malbery Street.*]

Buildings for Small Holdings. Materials, Cost, and Methods of Construction. By Thomas Potter, Author of "Concrete: its Use in Building, &c." *Small* 8o. *Lond.* 1909. *Price* 3s. *net.* [*B. T. Batsford, 94 High Holborn.*]

These two works are complementary to each other. Treating of buildings for model farms and ordinary farms of probably from 200 to 500 acres in extent, Mr. Winder's valuable work is an exhaustive treatise of the subject; while Mr. Potter's smaller publication deals with buildings of humbler character that may possibly be called into existence by the Small Holdings Act recently passed into law.

The homestead, as we know it in this kingdom, is the outcome of the slowly developing requirements of centuries. As illustrative of this, compare the primitive dwelling at Fulwood Head (p. 58), when farmer and cattle dwelt in close proximity under one roof, with the modern Whitewater (p. 91), or the smaller example, Beighton (p. 95). It would perhaps be fairer to compare Fulwood Head with the buildings, plans of which are given in Mr. Potter's work, and Whitewater or Beighton with the monasterial grange of Kirkstead (p. 120 and frontispiece); unfortunately no plan of the last-named is given us, but the photographic illustrations indicate buildings of no mean extent.

The growth of modern improvements in farm buildings is not accompanied by a similar improvement in the farmhouse itself—indeed, the plans given seem a retrogression rather than an advance upon older houses, and the order of precedence that will probably strike the reader of this book, or of that published some twenty years ago by Mr. Dudley Clarke, is, first and highest, horses, cattle, and pigs; next the farm workman, whose modern standard of comfort is illustrated by the plans of four good cottages of varying types; third and lowest, the "master" himself, whose wants are met by a six-roomed enlargement of the six-roomed cottage shown on plate 53.

Farmhouses are—like their occupants—of course of many grades, varying from the mansion to the proverbial "starvecrow," but the better-class farmer does nowadays understand the use of a bath; he and his family do appreciate modern sanitary conveniences within the walls of the house itself, and, where he is also the owner of the land, he contrives (agricultural depression notwithstanding) somehow or another to supply himself with them.

Mr. Dudley Clarke considered one w.c. (no bath-room) to be sufficient for the house of a tenant paying £500 rent and over per annum. Mr. Winder's working farmer has to do without that. A town artisan or clerk able to pay £30 per annum would scarcely look at a house which did not contain both; and the fortunate occupant of a Garden City cottage costing £150 to £200 to build has to endure them whether he wants them or not.

Plans of useful cottages are given, and the author regrets, as do most architects who have had to build them, that stupid by-laws make it impossible to construct them of wood; possibly under the practice necessitated by the Small Holdings Act this restriction may disappear. It will be noted that their life is put at 25 years, but instances could be quoted of several nearer 200 than 25 years, and still or recently quite habitable.

A wise fondness is expressed for the use of local materials, and the student should take to heart the fact that they have a peculiar fitness for the district to which they are indigenous.

Mr. Cowell, of Soham, and others contribute notes upon the art—now approaching extinction—of thatching; Mr. Beauchamp, of Sheffield, a chapter upon electricity as applied to farming and agriculture; cattle-sheds, stables, and their fittings are minutely described and illustrated, as are also their drainage and water-supply (the rain-water tanks, by the way, would be improved greatly by the addition of small filter chambers); and the smaller accessories, dovecotes, fowlhouses, piggeries, walls, gates, paths, all—even an artificial fox earth—find a place in this very useful and practical book.

Mr. Potter's work deals with buildings suitable to farms not exceeding 50 acres in extent. Small farms, both freehold and otherwise, of a somewhat larger acreage were not by any means unknown before the passing of the Small Holdings Act—an Act which, while attempting to create and plant upon the land a class of municipal tenants, has not provided the municipality itself with either the means or the information necessary for the solution of the problem in an altogether satisfactory manner. The purchase price of land, the ever-increasing cost of building, the clumsy bureaucratic ideals embodied in model by-laws, all add to the difficulties of the County Councils, and it is evident that new buildings can only be provided of the cheapest and simplest order; and to enable even this to be accomplished it is generally understood that by-laws which are still to be operative against the private owner are to be relaxed in the case of the public authority. This enables Mr. Potter to add wood to his list of available building materials, and he might with advantage have added another, viz. "cob" or clay walls, so frequently used in many parts of the kingdom, and particularly in the West Country in days not very long ago. For warmth this material is difficult to beat.

Mr. Potter favours walls of monolithic concrete of such extreme tenuity as almost to make one shiver. Plans of three grades of farm buildings differing but slightly except in size are shown. The smallest seems almost too good for a holding of 10 or 15 acres, while the largest might well serve one larger than 50 acres.

For the tenant the author provides a house or cottage of a single-story bungalow type, which he prefers to a two-story cottage. The obvious disadvantage of the bungalow, and one from which the two-story type is free, is that the living room of necessity becomes a passage room, and we get, as here shown, a room 14 feet by 12 feet, with no less than five doors leading to or from it. Couple this with 7-inch walls of cinder concrete, an exposed position, and the acme of discomfort would seem well within reach.

Three bedrooms, a scullery, wash-house, &c., complete the dwelling-house. Details of cost are given more or less net, that is without builders' profits, water-supply, drains, roads, fences, &c., somewhat important items to omit, especially as most of them are likely to be required. The single cottages are estimated to cost £200; the smallest of the farm buildings works out at about £180; to meet the omitted items would probably take £40—a total altogether of £420.

Then the land. If run out of cultivation, as some Essex land, for example, £10 per acre might be dear; if in high cultivation and favourably situated, £30 to £60 might not prove an excessive purchase price. At £30 per acre, plus £420 for the buildings, a 15-acre plot would cost a County Council £870 before a tenant could be planted thereon, and from him rent must be obtained sufficient for annual upkeep, and the sinking fund to recoup the outlay in such a number of years as may be decided upon by the Government officials. How much will do it is the interesting problem now being worked out. Four per cent. means well over £2 per acre. Five per cent. nearly £3. Much over this would seem to be "grinding the faces of the poor" with a vengeance, yet it must be done or the holdings must be let or sold to a capitalist of much the same type as the present tenant-farmer, but of smaller means and burdened with a greatly increased rent. However, the experiment is being tried, and the result remains to be seen. Whether successful or the reverse, the Act of 1908 will have called forth an able little work useful to many others than those for whose benefit the Act itself is intended.

T. E. Pryce [*A.*].

PROPORTION IN ARCHITECTURE:

AN EXPLANATION FROM A NEW POINT OF VIEW.

By R. M. Hamilton [*A.*], Perth, West Australia.

Proportion in architecture has been speculated and theorised upon ever since man turned his mind to the search for principles underlying design. In antiquity artificial canons of proportion in architecture were established, notably in Egypt and Greece, which were adhered to from custom, and which gained a semi-sanctity and authority through temple architecture being connected with the priestly office. How these canons were arrived at and on what reasons they were based is unknown, but probably they were founded on the relationship of certain measurements to others, numerical or geometrical, and in multiple or ratio. The difficulty of now unravelling these is due to our ignorance of the exact length of the unit of measurement of those times. These canons may be described as the mechanical method of proportion; but the matter may be approached from another point of view.

As the Greeks reached the highest pitch of perfection in architecture, and possessed an artistic perception superior to any modern people, we will limit the question to their work. What they accomplished shows such an intuitive sense of proportion, such an innate delicacy of feeling for the fitness of things, that it carried them far beyond anything moderns can show. In one respect their problems were simpler than ours. They had no enormous buildings put to multifarious uses and cut up into a multiplicity of small parts; they could almost choose their conditions; and with them largeness, breadth, and simplicity were the leading motives—restfulness and dignity, in place of unrest and banality. Whether this result was attained by rules thought out from observation and deduction—the mechanical method—or by the spontaneous intuitive sense of the right thing to do and the power of doing it which gives that feeling of inevitableness to all true artistic outpouring, the fact remains: their creations still speak to us even in their now mutilated state, and still invite a speculative investigation.

Proportion in architecture may be defined for our present purpose as the relationship of large parts to the whole edifice; of smaller divisions to larger; of height to length; of story to story; and of story to height and length of façade. It will, further, apply to the relationship of an important feature, such as a cornice, to the rest of the building.

The investigations by scientists of the phenomena and laws of vibratory action and its effects are receiving great attention, especially in connection with its effects on man's psychological nature. We already see a widely extended attempt among students of this vibratory theory to supply a working hypothesis for many phenomena lately unfolded, inexplicable by any present hypothesis. In fact, the law of vibration will be found at the bottom of all bearing on the human sensitiveness, and to apply also, I venture to suggest, to the case of artistic production in general, and especially to the subtilties of proportion.

The laws of vibration we can most clearly and easily understand from the phenomena of sound and music, as here the causes and effects can be most visibly demonstrated. Vibratory motion is shown to constitute the phenomena pertaining to sound, heat, light, colour. It will be applied to another series of still more rapid action, such as electricity, radio-activity, and up at last even to human thought. Thought is a mode of vibration which will be realised as a fundamental law of life itself. We live by vibration. Psychic sensitiveness, telepathy, thought-transference, are caused by impulses, and all living matter is governed by vibratory action. Everything has its own inherent rate of vibration which emanates from and impinges upon others. With regard to musical sounds, we know that notes which produce what we call harmony are those whose vibrations synchronise most frequently. If two tuning-forks or violin-strings of the same pitch are placed near each other, and one set vibrating, the second will gradually pick up that rate until it synchronises with the first and both give forth the same sound. Wireless telegraphy is the latest application of this principle. The law runs through all nature, including human beings, especially on the psychic side of our complex organisation. Our nature receives and responds to all impulses palpitating through the ether: some we receive through our outward organs of sense; others, more subtle, through our higher faculties—not much developed in many of us. As this becomes more generally recognised it will solve many of the deeper perplexing problems of our being. At the same time all the varied phenomena will fall naturally into their places.

There is only one law covering the whole domain of vibratory action—of which sound has been used for the purpose of elucidation—and our psychic nature is amenable to that law. It receives, responds to, and synchronises with such rates and to such a degree as each individual's nature is capable of; some are highly pitched, responsive to certain kinds of effects and dull to others. In this respect artists of all kinds are more sensitive than the ordinary man; they are more highly strung and perfectly tuned instruments, more impressionable, and responsive to subtler vibratory effects. All who minister to the loftier feelings, who seek to please and to satisfy their cravings after the beautiful, are artists—painters, poets, musicians, architects, and others. All are composers (placers together) of the ideal, seeing and feeling inwardly, and objectifying their impressions. The architect is one of the completest of artists, as he composes in the round when designing a noble pile, and combines form, colour, and material.

A great edifice is one of the loftiest conceptions of man's mind working within certain given limits, a delight to the eye and sense. As a composition of colour, form, and arrangement, what a symphony it is! It raises a lofty responsive effect within, filling us with the purest abstract pleasure and thrilling us with appreciative emotion. In producing this effect proportion assumes a pre-eminent importance. The relation of parts to the whole—unity, variety, symmetry, contrast—produces eurythmy, just as tones combined in melodies and chords produce euphony. Their subtle effects play on the finest qualities of man lying deep within his psychic nature. Proportion is the golden thread binding the whole composition together. Just what makes it good or bad has evaded and baffled explanation, for the effect is felt inwardly, and is not much reasoned upon outwardly on account of its subtilty—it is just accepted. Nevertheless, these sensations are as true and real as the most superficial, if not more so. Thereby the parts of a building, by their order, combination, and correlation, raise within us an harmonious state of vibration which we call proportion.

The Greeks were the most artistically sensitive of people. Music was recognised as one of their most important subjects of education, and with philosophy and metaphysics formed the greater part of their intellectual training. They fully realised the refining, elevating power of music; and in art it was their exquisite sense of harmonious fitness—intuitive probably rather than reasoned—which has established them their pre-eminence. Much search has been devoted to discover a canon of proportion by which they worked, but in all their temples variations are found. The beautiful result which appeals to us was reached, as with everything human, by degrees and by an orderly evolution, though certainly a very rapid one in their case. That spontaneous artistic feeling was due to their very sensitive temperament. The Greeks could sense inwardly the purest and most delicate *nuances*. The fine modifications introduced by them into their most beautiful edifices of the best period could only have been made to satisfy a wonderful delicacy of perception and receptivity to appreciate such ultra-refinements. It was almost a case of painting the lily. There must have been, too, a sufficiently large number of the nation who could recognise and also appreciate such artistic minutiæ outside a select few, for it cannot be presumed that such pains were taken to attain a pedantic perfection. The Parthenon was like a great chord of perfect harmony in its proportions, vibrating with that feeling of spontaneity and inevitableness with which all great inspirations palpitate on the senses, beating in on the psychic nature of man, setting it thrilling and vibrating in response, and with an intensity commensurate with his innate God-given capacity for receiving and delighting in them.

9 Conduit Street, London, W., *9th April* 1910.

CHRONICLE.

The New Constitution of the Institute.

At the opening of the General Meeting last Monday the Chairman (Mr. A. W. S. Cross, *Vice-President*) made the announcement that the Revised By-laws, with one exception, had received the sanction of the Privy Council, and that the enlarged powers granted under the Supplemental Charter of 1908 would now be exercised and the Revised By-laws come into immediate operation.

The exception the Chairman referred to is the draft By-law 24, setting forth grounds for reprimand, suspension, or expulsion of members. For this the Privy Council have substituted the old By-law 22, making it to apply also to Licentiates, and they have asked the Council to submit an amended form of words with reference to the action to be taken towards members who take part in competitions against the wish of the Council. This amendment will be taken into consideration by the Council without loss of time, and their recommendations will be submitted to the General Body.

The Revised By-laws came before the Privy Council for final consideration on the 23rd March, and their Lordships' approval has been signified in the following terms:—

"Whereas by Section 33 of the Supplemental Charter of the Royal Institute of British Architects dated the 28th day of March 1887, it is provided that the said Royal Institute may from time to time by Resolution of a General Meeting confirmed at a subsequent General Meeting, which shall be held not less than seven and not more than twenty-eight days after the former Meeting, make and adopt such By-laws as may be deemed expedient, and may in the same manner vary, suspend, and rescind any By-laws and make and adopt others in their stead, but so that the By-laws for the time being be not in any respect repugnant to the Law of England or inconsistent with the said Supplemental Charter: Provided always that no such By-laws shall be of any force or validity whatever unless and until they have been approved by the Lords of the Privy Council.

"And whereas the said Royal Institute has by

Resolution of a General Meeting held on the 7th day of February 1910, and confirmed at a General Meeting held on the 15th day of February 1910, made and adopted certain Revised By-laws to be substituted in place of the existing By-laws of the said Royal Institute.

"And whereas the said Revised By-laws were this day read at the Board.

"Now therefore, Their Lordships, having taken the said Revised By-laws (a copy of which is hereunto annexed) into consideration, are hereby pleased to approve the same.—ALMERIC FITZROY."

The revised constitution of the Institute is the outcome of the labours of the Registration Committee appointed by the Institute over six years ago [JOURNAL, 9th Jan. 1904], and the scheme embodied in the new Charter and By-laws is based on a report of that Committee which was adopted by the Institute on the 2nd April 1906. A *résumé* of the Registration Committee's proceedings will be found in the speech of Mr. Edwin T. Hall, Chairman of the Meeting which adopted the report [JOURNAL, 7th April 1906].

The momentous change in the constitution, especially in regard to the establishment of the class of Licentiates, is being made known by advertisement in the Press throughout the British dominions. The Council hope that architects throughout the Empire, whether in practice or acting as assistants, who are not members of the Institute will take this opportunity of becoming associated with the representative body of their profession. It is considered that only by some such step as this can the Institute hope to obtain through public action a higher general standard of professional attainment among architects, and a greater measure of organised strength for the protection of the interests of the profession.

The following letter has been addressed to the Presidents of Allied Societies:—

DEAR SIR,—We have the honour to invite the attention of your Society to an important development in the constitution of the Royal Institute of British Architects which has lately been sanctioned by the grant of a Supplemental Charter and new By-laws by His Majesty the King and the Privy Council.

A new class of members, having the chartered right to the designation of Licentiates of the R.I.B.A., has been created. This class is open to all practising architects of good standing who have attained the age of thirty years, and either (*a*) have been engaged as principals for at least five successive years in the practice of architecture, or (*b*) have been engaged for at least ten successive years in the practice or the study of architecture.

Candidates for this class are not required to pass an examination or to submit to election by the General Body, but must satisfy the Council of the Royal Institute that they are fit and proper persons to be admitted to the class.

Under the provisions of the Supplemental Charter of 1908 *candidates for the class of Licentiates will only be admitted during the twelve months from the* 23*rd March* 1910 *to the* 23*rd March* 1911.

Under His Majesty's Charter any Licentiate who is eligible as a Fellow may at any time before 31st December 1920 be admitted for nomination to the class of Fellows when he has passed an examination to be prescribed by the Council.

Licentiates will be required to make an annual payment of one guinea to the Royal Institute, and for this they will be entitled (1) to use the affix "Licentiate R.I.B.A."; (2) to receive the JOURNAL, the KALENDAR, and other publications of the Royal Institute; (3) to use the Institute premises; and (4) subject to the Charter and By-laws to attend Meetings of the Royal Institute.

In view of the necessity of closer organisation of the members of the architectural profession throughout the Empire, both for the advancement of the art of architecture and for the promotion of the interests of the profession by means of Parliamentary or other action, it is highly desirable that a knowledge of this new means of becoming associated with the work of the Royal Institute should be spread as widely as possible among those architects who are at present outside its walls.

Any action which may be taken in the future to secure a higher standard of professional attainment and a greater security for properly qualified architects can only be successful if it is based upon the support of a substantial majority of the practising architects of the Empire, and the Council of the Royal Institute hope that your Society will do all in its power to assist the efforts that are now being made to obtain this support.

We have pleasure in sending you herewith a packet of nomination papers for Licentiates, and we shall be glad if you will take an early opportunity of making an official announcement and of taking effective steps by sending by post to all the architects in your province a notice of the creation of this class, drawing special attention to the fact that it is only open for twelve months, and informing them that the above papers are in your hands and may be obtained on application at the offices of your Society.

We feel that it is the duty of the Institute and its Allied Societies to get into touch with all architects in the Empire, and we are sure that we may count on your zealous personal assistance to this end.—We have the honour to be, dear Sir, yours faithfully,

ERNEST GEORGE, *President.*
HENRY T. HARE, *Hon. Secretary.*
IAN MACALISTER, *Secretary.*

The following is an extract from an article which appeared in *The Times* of the 2nd inst.:—

The new powers with which the Institute has been invested will enable it to enter upon a more extended field of influence and usefulness. The hope is entertained that it will now be in a position to gather into its fold every

architect (whether a principal or an assistant) who can satisfy the Council that he has had a certain specified training and experience. Under the new Charter provision is made for the entrance of all such trained men, who are to receive the title of "Licentiates of the Royal Institute." Hundreds have already applied for admission, and it would seem natural to expect that all who are eligible to join the ranks of the Institute will do so for the furtherance of architecture. The Charter also consolidates and regularises the educational side of the Institute, and develops its activities in many other directions.

The Institute received its first Charter in 1837 from King William IV. Queen Victoria, on her accession to the throne, became its patron, and in 1866 commanded that it should be henceforth styled "The Royal Institute of British Architects." Under a subsequent Charter granted in 1887 the principal architectural societies of the United Kingdom and the Colonies were or have since become allied to the Royal Institute, provision being made for the representation of the most important of these societies on its Council. The examinations were extended and improved, and an educational curriculum was formulated under which architectural schools have been established all over the country. The result of this development was eminently satisfactory, the younger men fully responding to the claims made upon them. At the same time the Royal Institute realised that in order to educate the public generally in architecture it was necessary first to arrest their attention by demonstrating to them that the Institute was concerned not only with æsthetic considerations, but, in the words of the original Charter, with promoting "the domestic convenience of the citizens," and with this object in view the Institute placed the technical knowledge represented by their body at the disposal of the public. In 1890 it was heard for the first time as a corporation before a Parliamentary Committee on a Bill affecting buildings, public improvement, and the laying out of streets. From that time onward the Institute has taken part in practically every piece of legislation affecting the public improvement and embellishment of towns and cities, including the Town Planning Act of the last Parliament. The public have realised the value of an organisation which had no personal ends to serve and which occupied an independent position, of a body of technical experts in matters intimately associated with their welfare, and standing midway between legislative and executive bodies. At the present time there is a great and increasing interest taken in architecture, not only all over the country, but in the dominions beyond the seas, and a general sympathy with every movement for the embellishment of towns and cities.

With this increasing appreciation of architecture and the greater zeal and earnestness of its exponents it is not surprising that, particularly in the younger men, there should have arisen a desire for legislative recognition of their profession. There is now a prospect that this ambition may be gratified. As soon as the Licentiate class is established the Institute proposes to apply to Parliament for an Act to enable the public to distinguish between a properly qualified architect and a man who merely uses the title commercially without having any trained aptitude for the exercise of the art.

It is hoped, and the hope will be shared by many outside the ranks of the profession, that the changes now about to take place will greatly contribute to the prosperity of the Royal Institute as the corporate representative of British architects, and enable it to devote its energies even more successfully than before to its purpose, described in the words of its own motto—"Usui civium decori urbium."

The Charters and By-laws under which the Institute is henceforth to be governed are issued in pamphlet form to every member with the present number of the JOURNAL.

"Dry Rot" (*Merulius lacrymans*) in Timber.

With the last number of the JOURNAL was issued to members a Paper giving a description of the disease known as dry-rot in timber and enumerating some of the causes which contribute to its spread. The Council purpose issuing this document as an Institute Paper at the price of 2*d.* a copy so that members may procure copies to send to their clients if they think fit.

The Council desire to lay down a few principles which may guide architects in minimising and possibly arresting this disease in new buildings, viz.:

1. No timber should be used in such a position that the moisture in and around it cannot be readily evaporated, as, for example, if floors are constructed of solid concrete (with or without steel) wood fillets should not be nailed underneath to receive the ceiling.

2. No wood slips should be built into or on the top of concrete and afterwards covered with an impervious floor, and no wood boards should be laid direct on the concrete and afterwards covered with an airproof material, such as linoleum, oilcloth, &c.

3. All ground under a wooden floor should be cleared of any vegetable or fungoid growth and covered with cement concrete or asphalte, and this should be left as long as possible before any joists or flooring are laid.

4. No wooden pegs communicating with the earth beneath should be left in and through the covering over the earth.

5. Provision should be made for the abundant introduction of fresh air underneath all parts of the ground floors by means of inlets, and particularly at all angles so that cross-currents may be induced.

6. The concrete under floors should be thoroughly cleared of all small pieces of wood and shavings, as it has been found that the spores in these pieces of wood, drawing the moisture from the concrete, have been a means of spreading the disease.

7. In upper floors of wooden joists if a pugging be inserted for sound-proofing it is suggested that this be of some dry substance, such as slag-wool, but in no case must an impervious material be used for the ceiling beneath or the floor covering above.

Suggestions have been made by experts and others to creosote the ends of all joists built into a wall, but this is not generally practicable, as the odour of the creosote in a residence would be very objectionable to many.

Dinner to Mr. Edwin T. Hall.

Reference was made in the last issue to the complimentary dinner which the Council were then arranging to give to Mr. Edwin T. Hall [*F.*]. The occasion for the compliment was Mr. Hall's retirement from the Institute Parliamentary Bill Committee and the Council's desire to show in some way their appreciation of the valuable work he has done for the Institute on various Committees, notably those for the revision of the Charter and

By-laws, and to recognise also the eminent service he has rendered the profession when as delegate of the Institute he has attended before Parliament or Government Departments and given evidence on matters affecting architecture and building, or on questions relating to the practice of the profession. The dinner was held at the Café Royal on the 21st ult., the company including Mr. Ernest George, A.R.A., *President*; Sir Aston Webb, C.B., R.A., and Mr. John Belcher, R.A., *Past Presidents*; Mr. Henry T. Hare, *Hon. Secretary*; Professor Reginald Blomfield, A.R.A., Mr. E. Guy Dawber, and Mr. James S. Gibson, *Vice-Presidents*; Messrs. Max Clarke, W. A. Forsyth, J. A. Gotch, F.S.A., H. V. Lanchester, Ernest Newton, Andrew N. Prentice, Percy Robinson, John Slater, Leonard Stokes, Henry Tanner, jun., P. S. Worthington, *Members of Council*; Messrs. Stanley H. Hamp [*A.*], A. Needham Wilson [*A.*], E. Stanley Hall (Mr. Edwin T. Hall's son), and Ian MacAlister, *Secretary*. Letters were received from many other members regretting their inability to be present.

The late W. M Mitchell, R.H.A.

The death of William Mansfield Mitchell, R.H.A., which took place at his residence, Abbeylands, Killiney, Co. Dublin, on the 12th March, at the age of 67, is felt as a great personal loss by all his brethren in Dublin, and the passing of his kind, pleasant personality has left a void which will not be readily filled. Although Mr. Mitchell had been in failing health for some time past, it was not anticipated that the end was so near. It was a tragic coincidence that, almost to the day, his old friend and professional *confrère* of so many years' standing, Sir Thomas Drew, should breathe his last. Mr. Mitchell occupied a deservedly high place in the esteem of his professional brethren, and of all who had the privilege of his acquaintance. His extremely courteous manner and kindly disposition were such that it is safe to say he had not an enemy. When Sir Thomas Drew vacated the presidential chair of the Royal Institute of Architects of Ireland after an exceptionally long tenure of office, Mr. G. C. Ashlin became his immediate successor, to whom succeeded Mr. Mitchell, his brethren thus paying him the highest compliment in their power, for amongst the entire profession in Ireland there was no more popular and highly respected member.

Mr. Mitchell was a pupil of the late Sir Thomas Deane, and amongst his contemporaries in that office were the late Mr. (afterwards Sir) Thomas Newenham Deane, and the late J. J. O'Callaghan. Upon leaving Sir Thomas Deane's office, Mr. Mitchell entered into partnership with Mr. Wm. M'Curdy, R.H.A., then President of the Royal Institute of Architects of Ireland, who had a very extensive practice. Subsequently, after Mr. M'Curdy's death, Mr. Mitchell practised alone, and carried out a number of important commercial and other undertakings, and attained a foremost position amongst Irish architects. The chief works carried out from his designs were the Masonic Female Orphan Schools, Merrion, Dublin; the Hôtel Métropole, Dublin; Grosvenor Hotel, Dublin; the Spa Hotel, Lucan; Messrs. Poyntz' and several adjoining business premises in Grafton Street; Messrs. Grandy's premises, Stephen's Green; the new wing Mercers' Hospital; Messrs. Todd, Burns, & Co.'s large new premises, Mary Street, Dublin; the new hall connected with the Presbyterian Church, Upper Ormond Quay, Dublin; the City of Dublin Municipal Technical Schools; Messrs. Pim Brothers' extensive premises in Exchequer Street and adjoining houses; the Methodist Church, Clontarf; important additions to Glenart, for the Earl of Carysfort; additions to Holy Trinity Church, Blackrock; additions to St. Paul's Church, Glenageary; gate lodge, Kingstown Park; and many other works.

Mr. Mitchell was an old member of the Royal Institute of Architects of Ireland, in the working of which he took the deepest interest, being for many years and up to the time of his death a member of the council. Until a few months ago he was a Fellow of the Royal Institute of British Architects, having been elected in 1899; he resigned his Fellowship owing to ill-health. He was a Royal Hibernian Academician, and acted as honorary treasurer of the Academy for many years, taking an active interest in its affairs. He was a member of the old Architectural Association of Ireland, and when it was revived in 1896 was one of the first to rejoin. R. M. Butler [*F.*].

ARCHITECTS' BENEVOLENT SOCIETY.

Annual Report of the Council adopted at the Annual General Meeting on the 8th March 1910.

The Council, in submitting their sixtieth annual report, have to express regret that during the year under review, while the list of subscribers has suffered severely from the death of old members, only two new names have become enrolled among the members, viz. Mr. H. C. Corlette and Mr. Percy W. Lovell, while Mr. Wm. Glover has doubled his annual subscription.

In the relief of cases £1136. 18*s.* 6*d.* has been disbursed, including £270 paid to pensioners. The number of applications in which help was given amounted to ninety.

The Income Account shows excess of expenditure over income of £54. 0*s.* 2*d.* The demands on this account were largely relieved by a special grant of £25 from the Royal Institute of British Architects, by a special subscription of £20 from Mr. H. Beswick (in addition to his usual subscription of £2. 2*s.*), and by the sum of £47. 2*s.* 8*d.* recovered from the Income-tax authorities, being the rebate on two years' income.

The Capital Account has been increased by three bequests: Mr. J. W. Penfold £100, Mr. Joseph Parkinson £50, and Mr. N. S. Joseph £25. In addition to these sums the following donations have been received:—Mr. John T. Christopher £105, Mr. J. Macvicar Anderson £10. 10*s*., Mr. Arthur Ashbridge £10. 10*s*., Mr. J. Borrowman £10. 10*s*., Mr. John Belcher £10, Mr. Ernest George £5. 5*s*., Mr. W. Hilton Nash £5. 5*s*., Sir Lawrence Alma-Tadema £5. 5*s*., Mr. W. H. Lever £5, and some smaller amounts. Most of the above donors have from time to time made handsome contributions to the capital as well as being liberal annual subscribers.

In consequence of this addition to the capital, the Council were enabled to increase the Society's investments by the purchase of £200 Queensland 3 per Cent. Inscribed Stock at a cost of £171. 16*s*., and £200 New Zealand 3 per Cent. Inscribed Stock at a cost of £175. 16*s*.

Instead of meeting on undefined dates as hitherto, the Council have decided to meet on the second Tuesday in the months of February, May, July, October, and December, as well as before the Annual General Meeting in the second week in March, when applications will be considered and other business transacted.

In view of the diminution in the number of subscribers the Council would urge upon members to use their influence, on behalf of the Society, with all architects in active practice. As the aims and objects of the Society are, by advertisement and other means, brought prominently before the architectural profession repeatedly during the year, it is felt that the expense incurred in seeking further publicity would not be justified by the results. But it is essential, if the necessitous cases which come before the Council are to be adequately dealt with, that an effort should be made to secure the practical support of all architects who are in a position to contribute to the needs of their poorer brethren or to those whom they have left insufficiently provided for.

The following being the five senior members, retire by rotation from the Council:—Mr. Lacy W. Ridge, Mr. J. T. Christopher, Mr. J. Douglass Mathews, Mr. Wm. Dunn and Mr. Henry T. Hare. To fill the vacancies caused by these retirements the Council have the pleasure to nominate Sir Brumwell Thomas, Mr. Walter Cave, Mr. F. W. Hunt, Mr. Reginald St. A. Roumieu and Mr. Lewis Solomon.

The thanks of the Society are due to the Proprietors of *The Builder*, *The Architect*, and *The British Architect* for granting space for free advertisements in their respective journals.

The Council also desire to thank the Royal Institute of British Architects, both for generous contributions and for office accommodation, as well as the Staff of the Institute for their willing assistance in all matters connected with the Society.

COMPETITIONS.

Acton School Competition.—Members of the Royal Institute of British Architects are requested not to take part in the above competition.

By order of the Council,

6th April 1910. IAN MACALISTER, *Secretary*.

The National Museum of Wales.—An exhibition of the designs submitted in this competition will be held at Bloomsbury Hall, Hart Street, Holborn, from the 11th to the 16th April inclusive. Hours of exhibition 10 A.M. to 7 P.M. Admission free.

CORRESPONDENCE.

REVISED REGULATIONS FOR ARCHITECTURAL COMPETITIONS.

To the Editor JOURNAL R.I.B.A.—

SIR,—In the discussion at the Business Meeting on 28th February last, I moved on Clause 3 that the words "or Consulting Architect" be inserted.

In my observations I drew attention to the fact that in several competitions (and some of first importance) the assessor had been induced to act as consulting architect; and I expressed the opinion that this was in contravention of the spirit of the Institute's rule that an assessor should not be interested in the result of his award. Incidentally I adduced a personal experience in support of my argument. The personal experience is not worth further notice, but a note of the motion is required to give point to the subsequent remarks (pp. 419, 420) made by Mr. Hare and others.

May I take the opportunity of adding that the practice is conceivably the best possible in some cases, but that it is one of those which easily lends itself to abuse?—Yours faithfully,

A. SAXON SNELL [*F*.].

ALLIED SOCIETIES.

The Royal Institute of the Architects of Ireland.

A special and largely attended Meeting of the Council was held on Friday, 18th March, at 31 South Frederick Street, Dublin. The President, Mr. Frederick Batchelor, A.R.H.A. [*F*.], occupied the chair, and addressed the Meeting as follows:—This week will ever be marked in the annals of our Institute by the passing from amongst us of two of our oldest and most distinguished colleagues—Sir Thomas Drew and William M. Mitchell. To us who have had the honour and privilege of being associated with them in the work of this Institute, to us who have benefited by their wise counsel in times of difficulty and stress, to us it is given to realise, though very imperfectly, how great and irreparable is the loss which the architectural profession and this Institute have sustained by the lamented decease, within a few hours of each other, of these two lifelong friends. For forty-seven years—a lifetime; and more than a lifetime to many of us—has Sir Thomas Drew been identified

with this Institute. For forty-four years he has sat at this Council. From 1870 to 1873 he was Honorary Secretary of the Institute. In 1890 he was elected to the Presidential Chair, and so ably did he fill it, so appreciated by his brethren were his zealous efforts to maintain the dignity of his office, that for twelve successive years he was unanimously re-elected President—until, in fact, the new By-laws were passed in which the triennial election of officers was introduced, when Sir Thomas would no longer allow himself to be nominated for a further term. Since then, though much engrossed in public and professional business, Sir Thomas ever showed a keen interest in the affairs of this Institute. When just three months ago he received from the Lord Chief Baron a letter informing him of his appointment as Professor of Architecture in the National University he was naturally very much gratified; but, as he told me at the time, the feeling uppermost in his mind was that of satisfaction at the opportunity it gave him of organising such a school as would be of lasting benefit to the rising generation of architects in Ireland. He was a man of wide sympathies, always accessible, and ever ready to help and advise, especially the young student, who always occupied a very warm place in his heart. When the Architectural Association was resuscitated some ten years ago, Sir Thomas at once offered its members the use of rooms in his offices and also the use of his large and valuable professional library. In those important public buildings he designed during a long and distinguished career, in the great reputation he has left behind him as an architect, an artist, and a gentleman, his name and fame will be handed down, as an ideal and inspiration, to many future generations of students.

Of our dear friend and brother, William Mansfield Mitchell, I must say this: He was a man whom to know was to love. One of those rare Christian characters who neither speak nor think evil of any man, it can truly be said of him that he had no enemies. Absolutely upright, fair, and just in all his dealings, that knightly motto *Sans peur et sans reproche* might indeed have been his. Of a somewhat shy and retiring disposition, he did not live so much in the public mind as did his old friend and comrade Sir Thomas Drew, but he did most useful work for this Institute during a membership of some forty-five years, and in 1905 he succeeded Mr. Ashlin as President. Of William Mitchell's work as an architect it may be said that he showed the painstaking care and attention to detail which was characteristic of the man; his practice lay very largely in commercial work, and some of the finest business premises in Dublin were designed by him.

Gentlemen, if we to-day are oppressed by a sense of the greatness of our loss, by the gap which the passing of these friends and colleagues has made in our ranks, we are the better able to sympathise with Lady Drew and the members of Mr. Mitchell's family in their sorrow and bereavement, and therefore I beg to submit the following resolutions of condolence and sympathy:—

Sir Thomas Drew, P.R.H.A., LL.D.—The Council of the Royal Institute of the Architects of Ireland desires respectfully to convey to Lady Drew an expression of its deep sympathy in her bereavement. In the death of Sir Thomas Drew the Institute has suffered an irreparable loss. As its President, which office he held for twelve years, he devoted ungrudgingly his time and talents to the best interests of the profession he represented. An architect of the highest ability and culture, he will be remembered by his colleagues on the Council with affectionate esteem.

William Mansfield Mitchell, R.H.A.—By the death of William Mansfield Mitchell the Royal Institute of the Architects of Ireland have lost a loyal supporter and the members of the Council a valued colleague. A single-hearted gentleman, he held through a long professional career the esteem and affection of his brother architects, and the Council of the Institute, as their representative, desires to convey to Mrs. Mitchell and his sons and daughters an expression of its deep sympathy.

The resolutions were seconded by Mr. C A. Owen [*F.*], and supported by Mr. R. C. Orpen, who referred to the happy years he had spent as a pupil and managing assistant in Sir Thomas Drew's office, and by Mr. G. F. Beckett, President of the Architectural Association of Ireland. Mr. Batchelor then declared the resolutions carried, all present standing.

The Edinburgh Architectural Association.

Mr. J. B. Stoughton Holborn delivered a lecture on "The Spirit of Mediæval Art" at a meeting of this Association held on the 30th March. There were, the lecturer said, three main abstractions pursued by mankind—beauty, goodness, and truth—and the pursuit common to all the arts was the pursuit of beauty. The highest civilisation the world had known was that of ancient Greece, and the Athenians pursued all three. In the Middle Ages truth was lacking, and when this defect was remedied goodness was left behind, the result being the corruption of the Renaissance period. The present was a scientific and moral age, but the search for beauty was wanting, and the sordidness of our great cities was the outcome.

MINUTES. XI.

At the Eleventh General Meeting (Ordinary) of the Session 1909-10, held Monday, 4th April 1910, at 8 p.m.—Present, Mr. A. W. S. Cross, M.A.Cantab., *Vice-President*, in the Chair; 30 Fellows (including 10 members of the Council), 33 Associates (including 2 members of the Council), 2 Hon. Associates, and several visitors—the Minutes of the Meeting held 14th March having been already published [*ante*, p. 428] were taken as read and signed as correct.

The Chairman announced that intimation had been received of the sanction by the Privy Council of the Revised By-laws, with one exception, and that they would come into immediate operation.

The Hon. Secretary announced the decease of Jesse Horsfall, of Manchester, *Fellow*, elected 1893; and Charles Albert Monday, *Associate*, elected 1878; also of William Mansfield Mitchell, R.H.A., Past President of the Royal Institute of the Architects of Ireland, who had recently resigned his Fellowship owing to ill-health. Upon the motion of the Hon. Secretary a vote of condolence was passed to the relatives of the late Mr. Mitchell.

Mr. Arthur Hamilton Moberly, M.A.Cantab., *Associate*, attending for the first time since his election, was formally admitted by the Chairman.

A Paper by Mr. George Hubbard, F.S.A. [*F.*], on Architecture on the Eastern Side of the Adriatic having been read and illustrated by lantern slides, a discussion ensued, and a vote of thanks was passed to the author by acclamation.

The Meeting separated at 10.5 p.m.



THE ARCHITECTURE OF ADVENTURE.

By W. R. Lethaby [*F.*].

Read before the Royal Institute of British Architects, Monday, 18th April 1910.

BY the architecture of adventure I mean what to me seems to have been the living force and active principle of all architecture, the spirit of experiment in building. It is somewhat curious that of all the thousands of books which exist on architecture there is hardly one known to me which deals with the subject without some qualifying adjective, as Greek, Roman, or Gothic ; or one which asks what is the greatest common denominator of all of them which might come near being architecture itself, past, present, and future. And here, at the risk of some repetition, I must say what I think we are compelled to mean by this ambiguous and abused word. I have often tried to speak of ordinary customary building as being one with architecture ; architecture, in fact, is only building "writ large." But if, having two words, we desire to give them separate meanings, consistent though separate, then we must agree to mean by architecture building enhanced by sculpture and painting—that is, building "completely furnished," as Morris says. Architecture would then stand to building as opera stands to music. Architecture must thus, according to our choice, either mean building in general, or building intensified by accessory arts. In any case, mere needful and experimental building is the main substance, force, and origin of the art. When the higher architecture has appeared in the world, it has come as the result of spontaneous interaction of the arts ; the architect has wrought according to custom, need, and demand ; and sculptors, painters, and the rest have done the same. The resulting unity was not imposed by an architect's artistic ideal, but because all expressed their thought in a common current language.

Architecture or building, so far as at any given moment it deals with known traditional needs, should be customary ; so far as it has to meet changing conditions and ideals it must be experimental. For the customary part practical craft education would be best ; but how to meet changing needs, especially when one of the changes is the breakdown of custom itself, is a new and urgent question. However desirable it might be to continue in old ways or revert to past types, it is, I feel, on reviewing the attempts which have been made, impossible. We have passed into a scientific age, and the old practical arts, produced instinctively, belong to an entirely different era.

I have long been interested in the search for sources of inspiration in our art, always with the immediate inquiry before me as to what may be an inspiration to the architects of to-day and to-morrow. I have come to the conclusion that any basis on which there can be some general agreement over a long space of time will produce architecture of a sort. The one thing essential is this agreement, so that a process of development may be set up by continuous experiment.

A school of art is only generated by intensity, the heat of a common pressure. The only possible basis of agreement at the present time is the scientific method.

In a former Paper* I tried to examine the Greek theory that architecture was to be reached through a system of ratios. This idea could only be applied to a thing as fixed and simple in general type, as a temple. It belongs to a conception of holy architecture. The Greeks probably took over the notion of such a canon from the Egyptians; in any case, it belongs to many ancient peoples: the Arabs, for instance, find consolation (so do I) in the fact that the temple of Mecca is supposed to be built so that its length, breadth, and height are equal. The Greek thought on the matter was very clear-cut and intense. It was no mere talk of the wonders of proportion, which ends by pointing out that in any work there is, as a matter of fact, relation between the parts. For instance, in any given picture, there *is* some relation between the red and the blue; but this relation is not fixed for all pictures, and it was not fixed for this particular one until it was finished. I want to be clear about this: that proportion properly means what it meant to the Greeks, a definite prearranged relation of measured quantities. This view is, perhaps, most clearly brought out in the case of sculpture, to which they naturally came to apply similar schemes of harmonic measures. Polyclitus, the contemporary and equal of Pheidias, wrote a book on the subject, called *The Canon*, and made a celebrated statue to illustrate it. The head was one-seventh of the total height, and all the other parts had definite ratios. Moreover, a saying of his is preserved: "Success in art is attained by exactness in a multitude of arithmetical proportions." Greek artists all agreed to such a theory —that is, they set about discovering perfection; and we know what wonders they accomplished in consequence.

The Romans as certainly agreed in a desire for bigness and splendour, and they, too, succeeded according to their desires. The Arab builders fell into a love of bright colours, baked into shining tiles, and this, too, gave a character to *their* art. Any strong and general interest in building, felt by a people, will produce a living school of art. There is no one and perfect school, there is an infinitude of conceivable perfections.

ENGINEERS' ARCHITECTURE.

With all these variables, however, there has been one constant—the *building* interest; the delight in experimental structure, the adventure into the unknown.

I must fortify myself here with some historical data, in proof of what would otherwise be mere assertion. Notwithstanding the Greek theory of temple architecture, their architects, as a matter of fact, seem nearly always to have been engineers; and it is this engineering interest in architecture which I am about to trace. Their legendary craft-master was the mechanician Daedalus. Callicrates, the builder of the Parthenon, also built the great fortification called the Long Walls. Hippodamus, the celebrated architect, also of the age of Pericles, fortified the Piraeus, and was an expert in town planning. Archimedes himself was counted among their seven great architects.

The engineering element in Roman architecture is most marked, and it was this, indeed, which entirely burst the old bottles of tradition, and transformed the art into one of daring structural adventure. Most of the great Roman architects seem to have been engineers in the strict sense. Even Vitruvius, who was so much of a reactionary, was official keeper of war-engines, and he tells us that the art had three branches, building, dialling, and mechanics; meaning by the last the construction of military and other engines. Trajan's favourite architect followed the army and built his wonderful military bridge over the Danube. Architects in Rome were called

* "The Theory of Greek Architecture" [JOURNAL, 8th Feb. 1908].

" machinatores," also " structores," and " magistri." Architect was a more general term which included ordinary workmen.*

The identity between engineers and architects continued into the Byzantine period, and all the great architects of the time of Justinian seem to have been engineers. Anthemius, the architect of Sta. Sophia, is called the " mechanikos," and we are told that " he was an inventor of machines and reached the summit of mathematical knowledge." Indeed, he has left a book on the subject. Associated with him was, as Procopius says, " another mechanic called Isidorus." " They were the most suitable of all mankind for the purpose." Isidorus the Younger, who re-erected the dome after its fall, had been employed in building the fortified military outpost, Zenobia. The famous and beautiful Church of the Virgin at Jerusalem was built for Justinian by Theodorus, called architect and " machinarius." † The learned Benedictine, Leclercq, says that this name of mechanician, carrying the idea of constructor, is found in all epochs of the Lower Empire.

When we reach the Middle Ages we meet with evidence which shows the same state of things. Alnoth, the celebrated master of works of Henry II., was an engineer. In France, Eudes, the favourite master of Louis IX., went with him to Palestine and constructed the walls of Jaffa. The custom is well represented in the sketch-book of the architect Villard de Honnecourt, which treats of building, sculpture, geometry, and machines. Amongst his notes, which include an essay on Perpetual Motion, and many mechanical devices like power-saws, pile-drivers, crossbows, and war-engines, is one on the construction of a floor out of timber too short to bear across the space. This I note because we shall meet with it again.

The great mediæval buildings are, all the best writers unite in telling us, solutions of problems of how to throw stones high into the air, and balance them there. A great French castle or cathedral was not designed as beauty, it was developed along a line of experiment as surely as the great ocean liners have been so developed. We may almost regard it as an accident of traditional custom that the bishops and the people liked to have the fronts of their churches covered and their windows filled with didactic sculptures and stained glass. The essential construction, however, was conceived by any of the great masters as a problem of stress and poise, just as the designer of the Forth Bridge so conceived his problem.

THE RENAISSANCE.

The men of the Renaissance set themselves systematically to learn all that might be learnt. This is the mark of the new birth of learning. Its spirit is most completely manifested in that extraordinary man Leonardo da Vinci, and our own Bacon fully grasped and expounded the theory. But in building art a strange thing happened—as Morris puts it, " the past slew the present;" " strange to say, to this living body of social and scientific New Birth was bound the corpse of a past art. On every other side it bade men look forward, on the side of art it bade them look back." It is evident that one of the subjects opened up for scholarly investigation was the mighty architecture of Rome. Under other circumstances it might have been possible that the principles—the science of construction—should have been studied, and not the mere fashion of the outward adorning, but it was not to be. One reason why this was so may be suggested: Italian patriotism seized on the ideal of reviving the past of Rome, and putting away the intermediate manner of building which had been brought in by the German conquerors.

The notebooks and studies of Leonardo, however, show that it was always phenomena and principles which interested *him*. Large sections of his manuscripts are devoted to abstract

* Cabrol's *Dict.*, s.v. Architect.

† Cler. Gannean in *Q.S. of Pal. Expl. Fund*, 1898, p. 251. See also what Procopius says of Chryses of Alexandria: " A clever engineer who served Justinian as an architect."

exercises in planning, to considerations of dome-building and other structural possibilities, as well as to studies in engineering, machine-making, fortification, and canals. Amongst his schemes is one for a town, for Leonardo was a pioneer in town planning as well as in aviation.

This scheme comprises a system of low-level streets for commercial purposes, and an upper residential stratum. The roads slope to the higher level outside the walls, and within they are connected by bridges, while the lower region is reached by staircases and large areas opened to it for light. "Those," he says, "who would go through the whole place by the high-level streets can do so, and he who would go below can do so. The stairs must be circular because the corners of square ones are always foul." Another scheme is for combined streets and canals, by which cellars were made accessible to boats. "Let the width of the street," he says, "be equal to the average height of the houses." An important section deals with domes, being, as Richter says, "theoretical and ideal researches made in order to obtain a clear understanding of the laws which must govern the construction of a great central dome with smaller ones grouped around it. In these sketches [I am still quoting] Leonardo seems to have exhausted every imaginable combination to illustrate the consequences resulting from a given principle." Quite so; he was the first, that is, to enter on a systematic inquiry as to the mechanics of architecture.

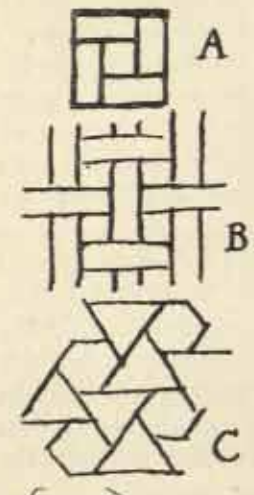
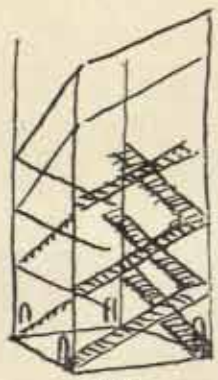


FIG. 1.

Among these studies into abstract architectural possibilities is an examination of the puzzle floor which I have already mentioned, it is caught up, investigated, and at once universalised into a principle—that of the Japanese lattice (see fig. 1).*

Another study which so far as I know has not been explained is the four-flight interwinding staircase (see fig. 2), which afterwards appears in Palladio, and which Inigo Jones thought the Venetian architect must have taken from Chambord, where it had been realised. Now, as Chambord was begun just at the time when Leonardo was living at Blois, and as the section of his studies which contains this remarkable exercise relates to the design for a palace for Francis I., one may, I think, conclude that this stair was Leonardo's invention. All these studies were probably for the complete treatise on architecture which he contemplated producing.† The spirit in which he followed investigation is expressed in an outburst so high-pitched that I am almost ashamed to read it: "O marvellous Necessity, thou with supreme wisdom constrainest all effects to be the direct result of their causes, and by irrevocable law every natural action obeys thee by the shortest possible process. O wonderful stupendous Necessity, the theme and artifice of Nature, the Eternal law." In another place he says: "There is no certainty where one may not apply any of the mathematical sciences."


FIG. 2.

The only other artist of the Renaissance known to me who caught the idea of investigating principles—the scientific spirit—was Dürer, and he possibly had access to Da Vinci's notebooks. In his manuscripts in the British Museum are some studies for domes of a parabolic section, and some exercises in plan schemes. The dome of parabolic section was "in the air" long before Wren in turn seized on it.

* Still later the puzzle floor was published by Serlio, and an example of it was made a wonder of at our Royal Society (see "Parentalia").

† Richter.

WREN'S TEACHING.

For England and more modern times we fortunately have some records of the thoughts of Wren on the art he practised. Although Wren was not a world-genius like Leonardo da Vinci, he was in many respects an English Leonardo, and the one architect we have had whose formal thought matters. I say formal as opposed to the flashes of insight of a dozen men like Pugin. Wren's was a great intellect most highly trained in all the science and philosophy of an ample age. He had been marvellously precocious, and during a very long life tried to satisfy an infinite curiosity by patient investigation. More than even a great artist, Wren was a great man. It may be somewhat curious to note here how often admirable practical skill in the arts may be linked to great poverty of thought in theoretic exposition, so that the splendid achievement of a Palladio or a Chambers in active work may be accompanied by mere twaddle of explanation and rhetoric.

Some recent writers have rather lightly taken it for granted that there must be some mistake as to Wren's scientific attainments, but we have the consensus of opinion of his contemporaries and of modern mathematical and astronomical experts that he was a powerful original genius. He is said to have been the first to make a model of the moon's surface as seen through a telescope, and the first to draw minute objects through a microscope. He and his friend, Robert Hook, another scientific architect, were conversant with the general law of gravitation before Newton brought it to a proof. Newton, in a letter to Halley, speaks of a visit he paid to Sir Christopher, in which they "discussed the problem of determining the heavenly motions on philosophic principles [that is, by the law of gravity]. You are acquainted with Sir Christopher; pray know when and where he first learnt the decrease of the force in the duplicate ratio of the distance from the centre" [that is, the law of inverse squares]. Halley replied that "Sir Christopher told him that Mr. Hook had frequently told him that he had proved it, but that he never was satisfied that his demonstration was correct." That is, the problem of gravity had been discussed by Wren and Hook and its actual law stated before Newton proved it in a convincing way.*

This same Hook says of him, "Since the time of Archimedes there scarce ever met in one man in so great perfection, such a mechanical hand and so philosophical a mind"; and again, in his treatise on comets, he gives a method of determining their parallax "invented by that incomparable mathematician, Dr. Christopher Wren." These things are beyond my knowledge, but I know that they represent wonderful powers.

It was after one of Wren's professional lectures on astronomy that, in 1660, a committee was formed which instituted the Royal Society, then described as "a Philosophical Society for the Promotion of Physico-Mathematical Experiment." Wren was instructed to sum up its scheme, and in this he explained that it was to "make provision *for Natural experimental philosophy*."

Wren was almost certainly the first in England to apply the methods of scientific investigation to the laws of structure, and Hook is said to have been the first who stated the mechanical properties of the arch. In Wren's earliest report on St. Paul's he says that it might be affirmed of its vault, "Not by an architect taking his measures from the Ancients, but by a Geometrician—this part being liable to demonstration—that the roof was ever too heavy for its butment."

We are fortunate in possessing records, however slight, of Wren's systematic thought on architecture in some fragments which have been printed in "Parentalia," and by Miss Phillimore. The teaching of such a man on his chosen art should have great value and weight, but they have been strangely overlooked and have never, so far as I know, been commented on. It seems clear from these fragments that he contemplated writing a history of architecture and also a general philosophy of its first principles, both possibly to be combined in one work. The fragments

* *Dict. Nat. Biog.*, under "Newton."

belong to a time late in his long life, for Wren speaks of the vaults of St. Paul's as in being. The notes may have been written when, over eighty, he had retired from active work to pass his time in contemplation and studies. Miss Phillimore has printed what seems to be an introduction to the historical study of classical buildings published in "Parentalia." This introductory part was cut away possibly because it dealt with subjects like the Ark of Noah and the Temple of Solomon, but there are some interesting general remarks by way of introduction. The part given in "Parentalia" contains a first-rate critical examination of Pliny's accounts of the Temple of Diana at Ephesus, and of the Mausoleum, also a description of the "Temple of Mars Ultor" and the "Temple of Peace" in Rome. In the preliminary remarks which I shall quote it appears that his intention in the proposed work was to give "a larger idea of the whole art" of architecture, and he thus began :—

"Whatever a man's sentiments are upon mature deliberation, it will still be necessary for him in a conspicuous work to preserve his undertaking from censure, and *to accommodate his designs to the taste of the age he lives in, though it appears to him less rational.* I have found no little difficulty to bring persons otherwise of good genius to think anything in architecture would be better than what they have heard commended. Many Gothic forms of cathedrals are to be seen in our country and many had been seen abroad, which they liked the better for being not much different from ones in England. This humour with many is not yet eradicated and, therefore, I judge it not improper to endeavour to reform the generality to a better taste in architecture by giving *a larger idea of the whole art, beginning with the reasons and progress of it* from the most remote antiquity, touching chiefly on some things which have not been remarked by others. *The project of building is as natural to mankind as to the birds.*"

In the fragment printed in "Parentalia" we have an admirable statement of the utility of architecture in the State in a phrase which might be taken as a motto by town-planning associations : "*Architecture has its political use ; public buildings being the ornament of a country ; it establishes a Nation, draws people and commerce ; makes the people love their native country, which passion is the great original of all great actions in a Commonwealth.*"

Rather extravagant that may seem to us, but a practical proof follows out of history. "The emulation of the cities of Greece was the true cause of their greatness. The obstinate valour of the Jews, occasioned by the love of their Temple, was a cement that held together that people for many ages, through infinite changes. The care of public decency and convenience was a great cause of the establishment of the Low Countries and of many cities in the world. Modern Rome subsists still by the ruins and imitation of the old."

"Architecture aims at Eternity ; and therefore *is the only thing incapable of modes and fashions in its principles.*" "The Orders are not only Roman and Greek, but Phœnician, Hebrew and Assyrian, *being founded upon the experience of all ages,* promoted by the vast treasures of the great monarchs and skill of the greatest artists and geometricians, *everyone emulating each other.*" The Orders, that is, were admirable so far as they embodied much experiment and long experience. And then he proceeds, in more general language : "Beauty, firmness and convenience are the principles : the two first depend upon geometrical reasons of optics and statics ; the third only makes the variety." The geometrical, that is structural, principles are eternal, but a changing element is brought in by new needs and new ideas of convenience. "There are two causes of beauty—natural and customary. Natural is from geometry, consisting in uniformity, that is equality, and proportion. Customary beauty is begotten by the use, as familiarity breeds a love to things not in themselves lovely. Here lies the great occasion of errors, but *always the true test is natural or geometrical beauty.* Geometrical figures are naturally more beautiful than irregular ones : the square, the circle are most beautiful ; next the parallelogram and the oval. There are only two beautiful positions of straight lines,

perpendicular and horizontal ; *this is from Nature and consequently necessity*, no other than upright being firm." He then passes to the expression of some very interesting particular views based largely on his favourite Roman architecture ; but enough has been said to show that he accepted that only as embodying a vast stock of past experience, and he knew that the real basis of architecture was necessity, law, geometry. Further on he says so still more clearly in the opening of the second tract (or second chapter of a general treatise) which begins thus :—

" Modern authors who have treated of architecture seem generally to have little more in view, but to set down the proportions of columns, &c., as they are distinguished into Doric, Ionic, Corinthian and Composite, finding them in the ancient fabrics. *Though more arbitrarily used than they care to acknowledge*, they have reduced them to rules, though in their own nature *they are but the modes and fashions of those ages wherein they were used.* Although architecture contains many excellent parts besides the ranging of pillars, yet curiosity may lead us to consider whence this affectation arose originally, so as to judge nothing beautiful but what was adorned with columns, even where there was no real use for them. It will be to the purpose to examine whence proceeded this affectation of a mode which hath continued now at least 3,000 years, and the rather because it may *lead us to the grounds of architecture* and by what steps this humour of colonnades came into practice." He thinks the habit of mind first was rooted when men sacrificed in groves. Then he passes on to what was evidently to be the chief content of his work, the consideration of the true grounds of architecture in structural law, in these words : " It seems very unaccountable that the generality of our late architects dwell so much upon this ornamental, and so slightly pass over *the geometrical, which is the most essential part of architecture.* For instance, can an arch stand without butment sufficient ? If the butment be more than enough it is an idle expense of materials ; if too little it will fall ; and so for any vaulting, and yet no author hath given a true and universal rule for this nor hath considered all the various forms of arches." Wren then proceeds to investigate the laws of stability by consideration of the centres of gravity of the several parts, basing himself on " Archimedes and the modern geometricians who have treated of centres of gravity." * His first demonstration regarding the arch is so simple and illustrates his method so well that I give its essence in general words. If the model of *half an arch* with its abutment (a diagram of an arch in a square of wall is given) will stand of itself, then the two halves when brought together into a complete arch will stand. " So it appears," he says, " that the design where there are arches must be regulated by the art of statics and the duly *poising of all parts to equiponderate. Hence I conclude that all designs must in the first place be brought to this test or be rejected.* I have examined some celebrated works as the Pantheon and judge there is more butment than necessary. I suppose the architect provided against earthquakes. The different forms of vaulting (he goes on) are necessary to be considered, both as they were used by the ancients and the moderns [i.e. mediæval builders], whether Freemasons or Saracens." He then reviews different types of vaulting—Roman, Mediæval and Byzantine—and gives us the interesting information that he adopted the form of vaults used at St. Paul's from Sta. Sophia, " because it was the lightest manner and requires less butment ; I have therefore preferred it to any other way used by architects."

The theory of architecture here erected on wide foundations of knowledge, historical and experimental, is truly a general explanation, a philosophy of architecture, and we shall far rather be disciples of Wren by understanding his mind than by vainly copying the forms of things which he himself used more or less under protest (as in the case of the balustrade) in different relations, and, as he himself says, according to " the gust " of the age in which he lived. I may say here

* He would have delighted in the recently discovered and just published treatise on the Centre of Gravity by Archimedes.

that no adequate account of Wren himself and his accomplishment exists except the remarkable life contributed to the "Dictionary of National Biography" by the man of the last generation who was best qualified to understand him, and I wish this could be printed together with Wren's own teachings, on which I have here ventured to comment. It would, I think, make the best foundation book for all our proposed teaching, for it should stir ambition, clear thought, and do much to shake off the dull artistic inertia and contented utterance of theoretic platitude which too much besets us all.

Wren tells us that he designed the beautiful saucer domes of St. Paul's by borrowing them from Sta. Sophia because they were the most mechanically perfect that he could find. Some sketches for the great dome show that its section was conceived as conforming to a general parabolic curve rising from the plinths of the great piers and passing through the abutments and over the crown of the so-called cone. I say "so-called," because, with its rounded top, its section is a parabola (see fig. 3). Wren saw, and probably was the first of architects to do so, that "necessity," which he equates with "nature," must be one with beauty. We are told that he always preferred his earlier scheme for St. Paul's, and it is plain he must have done so, for that has unity; the whole was a domical structure, not a structure with a dome. Some residuum of the idea is found in the present plan, for the nave proper is made equal to the choir and a vestibule bay is added in front. There is under the strictest limitations of law wide room for choice, of course. For instance, Wren doubtless might have counterpoised his main vaults by another means than the high screen on the aisles; but the expedient is perfectly scientific, and probably he borrowed the idea from mediæval buildings, looking on it as a continuous pinnacle.

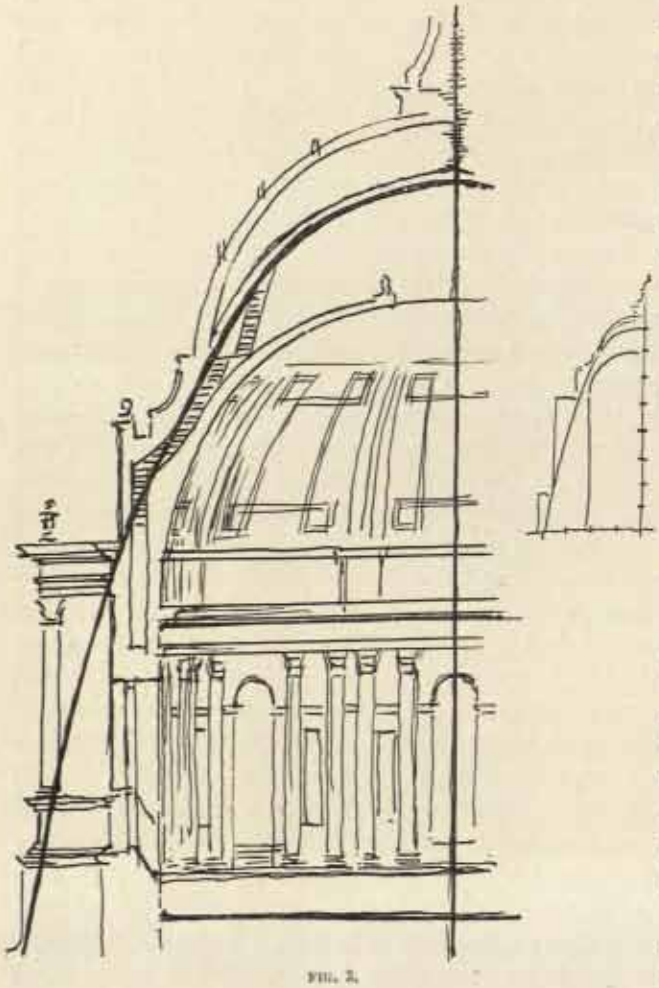


FIG. 3.

CONCLUSIONS.

I have tried to show in the foregoing extracts and comments that the living central stem of architecture has always been rooted in the spirit of active experiment and adventure for the further satisfaction of needs and desires. Two views as to the meaning and content of architecture have been held, and perhaps still are—at least some people seem to think they hold them. (1) That there is a *thing*, Architecture,—perhaps revealed in the one perfect form of classical art, or manifested more or less in different forms in divers times, as Greek and Gothic architecture.

Further, it is to be attained by a special sense in the artist. (2) That the essence of architecture is proportion, the discovery and use of definite ratios, and that by this method of proportioning an absolute architecture may be embodied. There is a third view which holds that architecture is primarily building according to the natural laws of structure and stability, according to need and order, and always with care and finish; that it must ever vary with ever-changing conditions, and that this ordinary building may have associated with it painted stories and sculptured stories, or inlays and fretted works and gildings, while the essential architecture is still structure, and the method of architectural growth is by continuous experiment in the possibilities of structure. I must safeguard myself from being thought to urge any quest of originality. Quite the reverse. I am satisfied that all search for it just blocks the way, with our preconceptions and limitations, to any possibility of realising a true originality, which properly is of the root, not of the appearance. True originality is to be found by those who, standing on the limits of the sphere of the known, reach out naturally to some apprehension and understanding of what is beyond; it is the next step in an orderly development.

What I *do* urge, in the simplest and plainest words, is concentration on practical, experimental, and scientific education. What we most need at the present time is the accumulation of power; we want high mechanical training, wide practical experience, and great geometry. And then we want to cover the field by a systematic research into possibilities. The possibilities of walls and vaults, and of relation between the walls and the cell, and between one cell and another, want investigating, as Lord Kelvin investigated the geometry of crystalline structures and the "packing of cells." In my view, it is true, such a training would not include the whole of architecture, but it would, I believe, open the way to the best we can attain. We might hope thus to give up hugging the coasts of the known, to sail boldly forth under the stars. Thus, and thus only for us, may we enter again upon the architecture of adventure.

In a late number of the JOURNAL there is an able paper by my friend Mr. Ball,* which touches on the imaginative and poetic side of architecture, and, in the main, seems true enough, but it hardly sufficiently, to my mind, recognises the actual facts of to-day. For instance, it says: "There is a phrase, 'reason in building,' which is the favourite catchword of the moment with a certain class of persons fond of oracular utterances." It then proceeds to say that it is "imaginative reason" which is wanted. Why, yes, of course. When we can get it I should like it very much; and I do find it in the Forth Bridge; I saw it last spring in a concrete railway viaduct, and in the autumn in the smart tidiness of the city of Munich, in the ironwork of the little wayside stations high up in the Chamounix Valley; in the new barracks at Strasbourg, and a new railway water-tower at Metz. I saw it the other day in a photograph of the last great sailing-ship built, a five-master, I think, and bearing a vast area of swelling canvas. Some brick-kilns have the beauty of Byzantine churches, and the most romantic modern buildings I know are the oast-houses of Kent. All these are, indeed, works of imaginative reason, and one may look at them with startled interest. In the same number with the objection to mere reason a quotation is made from a speech by Mr. James Bryce,† who at least is an expert on European history. He remarks that the historian of architecture when he comes to the nineteenth century is at a loss, and goes on to ask, "Now, is not the time about due when you must be beginning to do something desperate?"

Building has been, and may be, an art, imaginative, poetic, even mystic and magic. When poetry and magic are in the people and in the age they will appear in their arts, and I want them, but there is not the least good in saying, "Let us build magic buildings. Let us be poetic." Yet let me say again, it is because I want these things that I face this problem.

* "The Teaching of Architecture" [JOURNAL, 5th Feb. 1910].

† JOURNAL, 5th Feb. 1910, pp. 302–303.

If for the moment I may be a "self-constituted" educational adviser to this Institute, and express such a personal view, I, too, would say, "It is about time to do something desperate." We should devote the whole of the next session to papers on constructive science, get Professor Karl Pearson to give us the result of his researches on the arch, Professor Perry to draw up a report on the application of mathematical inquiry to structures, and our Fellow, Mr. Dunn, should lecture us on modern constructive problems. As talking of reason in design is to be tabooed as a self-evident truism, someone who is prepared to commit suicide should examine the prevalence of *irrationality* in modern buildings. The scientific side of our examinations should be rapidly screwed up, and the archæological side as rapidly unscrewed. All our travelling studentships should be made to bear on the same quarter. Pugin students should be made to analyse varieties of mediæval vaults, and Soane students varieties of staircase arrangement. Tites should be sent to study French railway stations, Grissells to work at German hotels, and Godwins to American hospitals.

I am anxious to repeat that I have not proposed to speak of the whole of architecture: the sublime sculptures of the Parthenon, the glittering mosaics of the vaults of St. Mark's, the solemn splendour of the glass of Chartres, and all the fear, mystery, rapture, delight and play which have been wrought into them; their energy, their pride, and their loveliness; and all their wreathings, frettings, platings and inlays. Although I have not spoken of these, again I say it is because I want just such as these—but different—that I have spoken at all. I want pathetic beauty in the barn and in the cottage, the most exquisite order, freshness, and efficiency in our town streets, the uttermost of costly majesty in the city's public palace, and still something beyond for our cathedrals, some expression of infinite aspiration. It is because I want all these, if it may be, or even less if it will be, that I have set myself to consider how they might be attained, and it is my own conclusions on the matter that I have now put before you. We need first the natural, the obvious, and, if it will not offend, the reasonable, so that to these, which might seem to be under our own control, may be added we know not how or what of gifts and graces. Thus may we hope to combine the two realities, the reality of natural necessity and common experience with the reality of the philosophers, which is the ideal, and to reconcile again Art with Science.

DISCUSSION OF PROFESSOR LETHABY'S PAPER.

Mr. Ernest George, A.R.A., *President*, in the Chair.

The PRESIDENT: I feel that there is profound wisdom in the argument that Professor Lethaby has put before us, and that we shall all take his teaching to heart. We seem to have got into the habit of using forms that are familiar things to us, and we do not sufficiently regard their constructive reason, their first cause. It would be good, I think, if we could eliminate from our minds a good deal that we know, and that is ready to hand.

Professor BERESFORD PITE [*F.*]: I beg sincerely to move a vote of thanks to my old friend Professor Lethaby for the Paper which we have heard to-night. It appeals to us all, as everything that he says does; but it is very difficult to listen to him and forget his past. Personally I cannot hear him without being wicked enough—I know he protests most vigorously against such a proceeding—to reflect on those exceedingly stimulating designs of his, and to seek to apply the doctrine to the daily work, simply because (I apologise to him most humbly for doing it) I think he would be sorry if we did not seek to apply these doctrines to our daily work; though I am quite prepared to admit with him that our business to-night is not to consider what one or other of us is doing or has been doing in the past, but to set our house in order in view of the admitted urgency of education—and, of course, some object in education and doctrine whereon to work. I know it does not carry us very far if we protest, as some of us have been protesting with some earnestness for some years, against the habit of loading the architectural student with the forms of bygone styles, then setting him examination papers on them and inducing him to imagine

that this is a necessary or a useful part of his architectural qualification. I hope the Paper to-night will help us a step further along the road of seeking definitely to separate antiquarianism from modern practical architectural education. Having said that, of course it is necessary immediately to say that a practical study of archæology—archæology as a living science, not an archæology that stores a museum with specimens, but an archæology which seeks to understand the thought, life, and method which lie at the back of every expression of thought, either in marble or in building in any way—a vivid realisation of the life and methods of the great nations of the past—is essential and vital to architecture. This is very different from merely coaching in the forms and being examined as to their reproduction. I must confess I am not altogether convinced by the theory, or convinced by the statement of the theory (perhaps it is due to imperfect appreciation of it) which Professor Lethaby has put before us. It seems to me to be a little dangerous to argue from genius. We might as well argue from Dædalus as from Leonardo da Vinci, because he was not only a town-planner who planned the Labyrinth, but was an aviator as Leonardo was himself. When we pass from Leonardo to Wren he turns our eyes away from those things which really fascinate us in Wren, those gifts which are altogether so wonderful, his extraordinary fluidity of treatment, if I may so speak, of the Classic Orders, the life and liberty and beauty that he breathed into the classic style, and the extraordinary originality which is, of course, a pure display of fancy and delight, so to speak, the dancing humour of his pencil and of his mind displayed in his steeples in St. Martin's, Ludgate, and in a hundred-and-one varieties of form. I know that Wren is, behind, a great mathematician, pre-eminently a man of science—fundamentally that. So was Mr. Penrose. Speaking with all reverence, Mr. Penrose had not the faculties of architectural composition, he had not the fancy and imagination and the play with which Wren delights us all. I suggest, Sir, there is another side; there is a parallel line; there is a line of scientific progression, that is of architectural adventure which is a perfectly continuous one, and a proper one, and one that is leading us onward; but it is not a mono-rail; there is a parallel stream of—I do not exactly know how to describe it—I dare not use the word imagination—there is a second stream of artistic sympathy always parallel with the scientific, if you will, always united with it, always coupled with it, not necessarily always equal in strength, perhaps, or equal in assertiveness, but there. So that you will find Leonardo, who was a mechanician, would paint "The Last Supper." You will find in Brunelleschi another fundamental example of a man of science, who, I venture to suggest, spent little more than scientific thought upon the conception of the vault of the Cathedral at Florence, and the design of the machinery for its construction, with the innumerable mechanical devices that were necessary. But he spent probably his best thought and his best labour, or what was parallel with that. At the same time the man was building San Lorenzo and the Pazzi Chapel. The architect's fancy and delight and humour and imagination were playing at the same time with works that I venture to suggest it would be pedantic to assume were based on any high scientific aspirations, or were really the product of scientific thought at all. It becomes a little difficult to argue from these outstanding geniuses, though one admits that one after another they all reach a certain finality in the fact that we are unable to follow them any further. If the architectural student is to be trained upon Lord Kelvin in the future, I think I shall have to throw up architecture and take to sketching. But there are a good many vastly interesting suggestions in Professor Lethaby's Paper. If we set to work on such a platform of building reasonableness, as he suggests to us, of believing (and I heartily do believe) that the factor of inter-columniation in the Greek Temple, for instance, was the depth of the lintel, the capacity of the marble to bear from point to point, which fixed the spaces between the columns, there is a constructive faculty there which becomes to us essential to our view of Greek architecture. Now, if we are to be Greeks we shall put a pillar at each corner of the portico and one beam across. Obviously, if there is nothing else to guide us but our perception of constructive adventure and achievement, all our relation to the humour and the interest and the life of past architecture vanishes apart from its essential constructive achievements. So that if it is inter-columniation, the ferro-concrete beam at once dismisses all the charm, all the sweetness (and we shall regret it enormously) of the Greek method. We can do it if we wish. We can ascend the columns and live upon the top in a world of reverie, or in a world of delight, and bless the engineers for anything and everything that they may give us. Engineering brings us to a very practical exposition of almost everything that Professor Lethaby has said. It is only to us, as architects, living in this work-a-day world of ours, that his doctrine is necessarily somewhat ethereal. When we come to engineering we see the doctrine brought down to solid earth. For years engineering works have impressed me—I venture humbly to express a personal experience—more than any other class of modern building. The whole circumstance of a railway tunnel, cutting, bridge, or viaduct, and of the interlacing of lines and levels that you get in the approach to a big city, is enormously impressive to the eye and to the mind, and vastly suggestive of wisdom and force and skill and purpose and the energy that is characteristic of our age. I have no doubt that in the future the very rivets of the

engineer will have all the sanction of the triglyph and the dentil of the Greek. It must be so. Their guttæ have no more special charm than the rivets on the underside of a compound beam. So that we shall gaze at the Forth Bridge and the other achievements of engineering with wonder. But the world as it is constituted will not stop there. The engineers will not let it stop there. Is it our business to let it stop there? Where shall we be if we let it stop there? Can it stop there? I do not know that it can. As far as we are concerned all the static facts for the everyday practice of architecture are arrived at and achieved. The knowledge required of brickwork, to deal with all the ordinary problems of architectural practice, is extremely limited and easily acquired. It is obviously the same with regard to steelwork, and many of the other scientific sides of the theory of building. When we have got as far as we need, where are we to go next? In domestic architecture, in civil architecture, in ecclesiastical architecture we have come to the end of our tether tolerably soon, and buildings will be singularly devoid of interest if we stay there. The only thing we can do in those circumstances is to lay by a hope, a hope for that future view of things, that distant view of things when what is practicable to us to-day is crystallised into something which is beautiful to, shall I say, the tenth generation to come—to try to cast our minds forward and realise an interest in that which is present, which we fail to take in that which is past. How far this is possible I cannot say. I feel that there is something in it. There is more than something in it. It is probably along such lines that we shall find—*we* shall not find it, but it will be found—the appreciation of our own work lies. But meanwhile we are children of the Renaissance; we have to do what Alberti did, as Leonardo did—we have to take up those forms which evoke sympathy and pleasure in those around us, and employ them for the purpose of harmonising the expression with the age in which we live. We can move in advance of the age in which we live; we can get right out of touch with it; but it seems that, ever since the Renaissance put the hands of the clock back, Science has adventured into the future and despised the past, and Art has adventured into the past and despised the future. And it is for the architect somehow or other to combine those two things, the view that goes back into the past and rejoices in the re-creation and the re-echoing of that which was always an expression of the delight of the builder in his work, with the ceaseless and necessary onward progression which is culminating in our own age, and of which Professor Lethaby's paper to-night is a very significant indication.

Mr. H. HEATHCOTE STATHAM [*F.*]: I beg to second the Vote of Thanks for the Paper, which is not only interesting but which I think may be rather a landmark in regard to our modern thought of architecture. I will refer, in the first instance, to one or two details. In regard to what Professor Lethaby said about the Greek idea of proportion, I agree with him that that was with the Greeks a system of definite measurement; but whether it really produces all they aimed at is another question, and, if you push it too far, you come to that point to which Pennethorne got—that, owing to the effects of perspective, you only see the proportions really right from one point of view, and he regarded the Parthenon as a building to be viewed from one point of view only. I say that is a *reductio ad absurdum*. There are some interesting remarks about Wren. I should like to know, if Wren had such strong ideas as to the futility of the columns which were put there because people liked them, why he kept putting pilasters where they were not wanted, and I should like to know why he put that second story to the nave of St. Paul's. I am quite aware that there is a theory now—I have heard it before to-night—that that second story was for constructional reasons. I can imagine that in the transepts he may have felt it was wanted as an abutment to the dome; but as for carrying it all along the nave, I maintain that was done simply as formal architecture, and that those small domes have not such a thrust as to require that. I do not think you can call a cone, although it has a dome at the top, a parabola. A parabola is a curve which, if produced to infinity, is always tending to get nearer to a straight line, but never becomes straight. You cannot call two straight lines joined by the segment of a circle a parabola. Coming to the real gist of the Paper, I was very much struck with this sentence—that any strong and general interest in building felt by a people will produce a living school of art. I think that is completely true, and that is what we have to long for now, that there should be a strong interest in architecture. And then Professor Lethaby follows upon that by speaking of the one *constant* which there is—the building interest. I quite agree with him if he would go a step further. I ask, is there no other form of adventure besides adventure in construction? If it is true that at the Renaissance people looked back to the past instead of considering the present, should not we be very sorry to lose all that Renaissance work—the Riccardi and Pitti and Farnese palaces and so on, and even St. Peter's with all its faults? Then when you speak of Leonardo's studies for the construction of domes, I note one page of Leonardo's dome sketches, which has been published in one of Baron de Geymüller's works—which is obviously a set of sketches for architectural effect and different ways of combining domes; so that Leonardo certainly looked at it from that point of view as well. There is a true parallel between engineering and castles. I always say the mediæval castles which we now think picturesque were purely military engineering;

that the Roman aqueducts which we now think so picturesque were purely civil engineering; and, in fact, the real parallel is between Roman aqueducts and the Forth Bridge; but I cannot admit the parallel between engineering and cathedrals. Of course their style grew out of the struggle with construction; but was there no other reason than a structural one for the three arches in front of Peterborough Cathedral, or for the spire of Salisbury? Were not they built for beauty and enjoyment? I propose to put it that architecture is the poetry of plan and section. You have to have a plan and section of the construction of the building; architecture, I say, is the treatment of plan and section so as to produce a poetic effect on the mind, and that, even without painting and sculpture. Take away all the mosaic out of Santa Sophia at Constantinople, and it will still be a great building. How does Walter Pater put it in the article "Winkelmann on Greek Art"? "Architecture, which begins in a practical need, can only express by vague hint or symbol the spirit or mind of the artist. He closes his sadness over him, or wanders in the perplexed intricacies of things, or projects his purpose from him clean cut and sincere, or bares himself to the sunlight; but these spiritualities, felt rather than seen, can but lurk about architectural form as volatile effect, to be gathered from it by reflection." So that we are to bring something of our own to it. There is the same thought in Tennyson's "Palace of Art":—

> "Full of long-sounding corridors it was,
> That over-vaulted grateful gloom,
> Thro' which the livelong day my soul did pass,
> Well-pleased, from room to room."

If we could have a great palace like that, independent of cost, with endless corridors and rooms arranged for climax and variety, surely that would be a great poem even without the addition of mosaic and sculpture. I should like to mention one little testimony which came to myself as to the effect of architecture. A good many years ago I was staying with my old friend the late Dean of Salisbury, in exceptionally bright and beautiful July weather. I was in the Cloisters with a lady, also staying there, who knew nothing about architecture, but was very much interested in painting and sculpture. We stood there for some minutes looking up at that pyramidal pile of building, and at the spire which, in the bright sunlight, looked almost like frosted silver going up into the blue sky, and my companion suddenly said: "I believe architecture is the greatest of all the arts, after all." She knew nothing about construction; that was the effect of the pure beauty of architecture. Nevertheless, I think Professor Lethaby's idea of paying more attention to what he calls adventure in structure is very full of help and suggestion for us, provided, I say, that it is recognised as the groundwork of adventure in design. I think the one grows out of the other. But with that reservation there is a great deal in his Paper with which I am most strongly in sympathy; it is a most remarkable and thoughtful address which we shall all do well to take to heart, and consider all the thoughts to which it naturally gives rise.

MR. PAUL WATERHOUSE [*F.*]: I will endeavour to speak, Mr. President, as you have asked me, but I feel this is a night upon which we are on a high level, and that I shall hardly come up to the standard. I have enjoyed the Paper very deeply, and I join very heartily in the vote of thanks. One feels that the author is one of the men who know, who really appreciate what architecture is, and further appreciate that there is more in it than we can understand. He is one of those who approach architecture with their hats off, reverently. There are not many men who do that. Most of us, no doubt, look upon it as a matter of daily business and forget the upper aspects, the divine aspects, the things which we can hardly look into at all. We have had a wonderful insight to-night into some of those higher aspects, and we have all been helped to think on the subject. Professor Lethaby will not mind my saying that with many of his sentences I have been in total and healthy disagreement. I rather feel that both he and Professor Pite have taken a pessimist's view, which they need not have taken. I also feel with regard to one thing that Professor Pite said that I must be allowed a word of protest. He put the protest in himself for fear we should any of us think he was unduly running down the study of the past, but I cannot help feeling that we are as much in danger now as ever of ignoring the value of that study. I cannot bear to hear a word said which would induce any young man to think that one jot or tittle of his study of ancient architecture can be for one moment remitted. Professor Lethaby has given the most beautiful definition of the position which he conceives architecture takes. I think he reaches the climax of his Paper, where he points out that "true originality is to be found by those who, standing on the limits of the sphere of the known, reach out naturally to some apprehension and understanding of what is beyond." I cannot conceive a more adequate or poetical or truthful description of the higher architect's position. But the man who is standing on the limits of the sphere of the known must be sure that it is known, that he has a reasonable share of knowledge in that past. I do not know what Morris could have meant when he spoke of the Renaissance, saying that on every side the Renaissance bade men look forward, except in art, in which it bade them look back. I think there is a mistake about that. As I understand it, the art of the Renaissance is only part of the great movement in literature and culture which you might call looking back, if you like to use that expression. But it was not looking back

in the sense of archæology; it was an enormous revelation to mankind that there is no pleasure so exhilarating or stimulating as that of finding oneself in complete spiritual sympathy with an epoch of the past. That is not looking back; it is simply taking blood and vitality out of the past ages and preparing oneself for a forward movement. If I have said one or two words of criticism it is only because I feel a deep interest in what has been said, and I realise that in matters of this kind if a man differs he does not necessarily cease to sympathise greatly with what has been said on the other side. It is only another view of the same thing, and our art is so big a matter that we can afford to look upon several sides of it at once. With regard to the remarkable quotation from Miss Phillimore containing Wren's statement that a man must conform to the taste of the age in which he lives, I believe in one version of that which I have read elsewhere the word *geist* is used —the "*geist* of the age." I notice that Professor Lethaby has quoted it as "gust" and as "taste." Is it possible there is a doubtful reading on that subject? It is rather interesting to me to know what the word used by Wren actually was.

PROFESSOR LETHABY: I took it for "gust." I did not know that there was any possibility of doubt. I may have made a misreading, but I have no doubt it is "gust" in the sense of "taste."

MR. STATHAM: I think so because that was a word very commonly used then. They did not talk about the German *geist* in Wren's days.

PROFESSOR LETHABY, having acknowledged the vote of thanks, said: I agree with almost everything that has been said in the discussion. I do not know that one ought to be careful to try to reply to everything that is said from other aspects and other standpoints. Of course, I myself have written this evening from a special area that I marked down, and I hoped that I was careful to limit myself by saying that I did not think—again and again I tried to say it—it exhausted the whole of the possibilities of architecture. Perhaps there were two main things that I thought of. The first is that the method of design to a modern mind, I think, can only be understood in the scientific (in the sense of Lord Kelvin, that somebody has spoken of with horror), or in the engineer's sense of a definite analysis of possibilities—not as a vague poetic dealing with poetic matter, with derivative ideas of what looked domestic, or looked farmlike, or looked ecclesiastical—the dealing with a multitude of flavours—that is what architecture has been doing in the last hundred years. It has been trying to deal with a set of flavours—things that looked like things but that were not the things themselves. Old farmhouses and cottages are things themselves—cottages and farmhouses. Now we, the best of us, are trying to build things which shall *look like* farmhouses and look like cottages, and so on. It suggests to me a story that I am reminded of by seeing my friend Mr. Horsley in the room, which he told me twenty-five years ago. Passing down a back street in London he saw a card in a window, "Fine jam, good strawberry flavour, 4*d*. a lb." It is not the strawberry flavour we want, it is good sound food, I take it. I venture to say that the living stem, the only possible stem of building-design, which of course is alive now and has been alive all through the times immediately past—that stem can only be that of the analysis of possibilities—the scientific method. That was my first point, and my second point I have entirely forgotten, as I thought I should.

MR. R. WEIR SCHULTZ writes:—

I have ventured to put together a few of the thoughts which occurred to me during the course of Professor Lethaby's paper, and of the subsequent comments on it, and I now offer them in place of the rather incoherent remarks which I made in response to the unexpected call of your President to take part in the discussion.

A humble disciple of the Master whose learned and absorbingly interesting address we had been listening to, I felt completely in agreement both with his point of view, and with the course of action which he outlined as a serious possibility for the immediate future. The historical *résumé* interested me, especially with regard to the fresh light thrown on the important part played by mechanics and engineering in the thoughts and works of the Old Masters.

The reference to fortification and military engineering reminded me of an interesting piece of fact which I came across some time ago when looking up the history of a well-known family of Scottish master masons, the Mylnes, who for at least twelve generations in direct descent practised the craft of masonry, and not only schemed but carried out many notable historical buildings in Scotland. It was, I think, John Mylne, sixth of the line, who, while in active practice of his craft as master mason about the middle of the seventeenth century, was appointed *Engineer of Fortifications and Principal Master Gunner for All Scotland.*

These Mylnes eventually drifted south, as Scotsmen seem to have a habit of doing, and Robert Mylne, eleventh of the line, practised in London as architect and *engineer* during the latter part of the eighteenth and the beginning of the nineteenth century. This Robert was trained as a mason under his father in Edinburgh, and was the first of his family to definitely adopt the designation "Architect" as distinct from mason. He was the engineer of the first Blackfriars Bridge, of the Gloucester ship canal, both examples of the "adventure" of the times. He was also engineer to the New River Company, and as such laid out their Islington property—a notable essay in town planning. He filled the posts of surveyor to

St. Paul's Cathedral, Greenwich Hospital, Canterbury Cathedral, and the Stationers' Company of London, and was a Fellow of the Royal Society.

The brothers Adam were *engineers* also, as well as both *builders* and architects, and the old North Bridge of Edinburgh, a very fine piece of engineering, which spanned the deep valley between the Old and New Towns, and which was demolished only a few years ago, was, if I remember right, both schemed and erected by them.

It is surely an utter fallacy to say that both the artistic and the mechanical or mathematical instinct are seldom found to be keenly developed in the same person. There are many such amongst our younger architects, and, to take an instance amongst the seniors, I can well remember Mr. Norman Shaw's keen interest in all matters pertaining to mechanical construction, and I can still call to mind a wonderful fully-worked-out detail of the iron or steel construction of the roof of the New Water Colour Room at the Royal Academy, which he brought down to the office one morning all carefully worked out by himself, and drawn with his own hand. And what Mr. Shaw does not know about the mechanism of clocks and watches is not worth knowing, as those of us are aware who have had the privilege of seeing his collection, and of hearing him talk on this, one of his most favourite subjects.

Burges was another of the same order. Wasn't he the first Modern to investigate the methods of the old lead workers; and isn't his wonderful measured drawing of the Amiens flèche a model for all time of how an architectural study of a constructive masterpiece ought to be undertaken?

It seems a pity that Professor Pite should persist in ignoring the fact that good construction and good design go hand in hand, are part of one and the same thing, and that he should continue to argue that if construction is once again given its due prominence in architectural training the result will be the apotheosis of the commonplace. Surely all history is against him. Is not construction the basis of all fine mediæval architecture? Was not the whole scheme of say a great cathedral a constructive one in its essence—and what finer and more romantic architecture will you find anywhere? Is not Gothic architecture an embodiment of the romance of construction?

We hear a good deal about the high quality of modern domestic architecture in this country, but after all what does it amount to?—little more, I think, than a parody of the simple traditional types of cottages, yeomen's houses and small manor houses which are still to be found dotted about the country, and most of which were erected by the local builders with the materials at their hand in the customary manner of their time, without the aid of office-trained architects.

One has also heard a good deal lately about the "English tradition" in the architecture of modern public buildings, but what is this but a revival of the type of Palladian architecture introduced into this country from Italy in the seventeenth century, a revival without discrimination and very indifferent in quality?

One speaker remarked on the use by Wren of pillars and pilasters on his buildings, but has not the lecturer shown that Wren rather apologised for working in the fashion of the time; and, after all, does not the real interest of Wren's work lie in his mastery of the science of construction, and his application of it to his buildings.

Nowadays we have new materials and new constructive methods to deal with. Let us adventure a little way forward with them, discard the old worn-out, dead forms, and evolve fresh ones from the problems they evoke. Recently in London one had watched, amongst other things, the growth of the two new Post Office buildings—the one in Newgate Street, and the other at the foot of Wimpole Street—both being constructed with ferro-concrete. One had almost ventured to hope that something interesting and appropriate in the shape of fresh thought would have shown itself on their façades—something evolved out of the lines of the construction within. But, no! Outside, we now see the same dull, dead applied pilasters and arches and cornices, having little relation to what is inside.

There is, I fear, not much hope for us of the present generation, but there may be a little if we will only take to heart seriously what the lecturer has told us in all seriousness, and act on his advice—advice the outcome of clear reasoned thought, the matured thought of one who has pondered on the subject for many years—and if it be too late for us to benefit, ourselves, let us see to it that the generation now growing up is started off on better lines, and there may then be some hope for the future of architecture in this land of ours, even if we do not live to see its realisation.

MR. J. L. BALL, Director of the School of Architecture, Birmingham, to whom a copy of Professor Lethaby's Paper had been sent, writes:—

I should like to offer a brief comment on Mr. Lethaby's lecture, not indeed by way of *criticism*, which would be beyond my power and my inclination. A contribution to thought of so weighty and elevated a character can but be received with respectful admiration, even by those who have the misfortune to differ on some points from its author.

I see no cause to withdraw or to modify the distinction which I made between the practical and the imaginative reason. The distinction exists, and has an important bearing on the subject of discussion. Mr. Lethaby thinks that it does not recognise the actual facts of to-day. But how so? How can the circumstances of any special period affect a purely metaphysical distinction? The powers of the human mind are probably just the same to-day as they always have been throughout

recorded time. All that we can say is that circumstances have caused some of these powers to be unduly exercised, while others have fallen into disuse. An effort of the will would be enough to restore the balance. Mr. Lethaby admits that he himself has remarked evidences of what I call the imaginative reason in certain works at Munich, Strassburg, and Metz. Is this distinction then valid only in Germany, the modern home of philosophy?

I am convinced that part of the difficulty which some of us experience in Mr. Lethaby's theory of art is due to verbal misunderstandings. For example, much of what he calls engineering we would prefer to call architecture and building. In our day the architect of a bridge is popularly termed an engineer, while in the fourteenth century the architect of a bridge was known probably as a master mason. Now the essential quality of a bridge is stability: therefore by whatever name its contriver is known a bridge is a work of building and architecture. But the car which runs over it, and the ship which sails beneath, are works of engineering. Their essential quality is mobility. Engineering is in fact the making of engines, of machines, and the one indispensable quality of machines is that they shall *move*. The difference between the work of the engineer and the work of the architect is precisely the difference between mobility and stability. Mr. F. Lanchester once said to me: "The difference between my work and my brother's is that mine must move and his must not move." It would be difficult to distinguish more concisely.

TOWN PLANNING.

PAPERS COLLECTED BY THE R.I.B.A. TOWN PLANNING COMMITTEE.

XVI. COMPARISON OF STATUTORY PROVISIONS RELATING TO STREETS IN LONDON AND LIVERPOOL.

By W. E. Riley [*F.*], Superintending Architect of Metropolitan Buildings and Architect to the London County Council.

I have pleasure in acceding to the request of the Town Planning Committee to prepare a statement comparing the provisions relating to streets contained in the London Building Act 1894 with those in a more recent statute. The Liverpool Corporation (Streets and Buildings) Act 1908 has been taken as being a good example of wider powers for dealing with the formation of streets and the development of estates, and in the following statement an endeavour has been made to place side by side provisions which have any analogy in the two statutes.

London Building Act 1894, Part II.	Liverpool Corporation, &c., Act 1908.
Section 7.—Before any person commences to form or lay out any street whether intended to be used for carriage traffic or for foot traffic only such person shall make an application in writing to the Council for their sanction to the formation or laying out of such street either for carriage traffic or for foot traffic (as the case may be): Every such application shall be accompanied by plans and sections with such particulars in relation thereto as may be required by printed regulations issued by the Council and the Council shall forthwith communicate every such application to the local authority: And no person shall commence to form or lay out any street for carriage traffic or for foot traffic without having obtained the sanction of the Council.	Section 4.—(1) No person shall commence or proceed with the formation of a new street or the widening of an existing street or the widening or adaptation of any road footpath or way so as to form a new street otherwise than in accordance with plans and sections previously approved by the Corporation. Section 4.—(2) Such plans sections and particulars to be furnished as may be reasonably required by regulations issued by the Corporation.
Section 10.—(1) Before any person commences— (*a*) To adapt for carriage traffic any street or way not previously so adapted or to use or permit to be used for carriage traffic any street or way not previously so adapted; (*b*) To adapt as a street for foot traffic only or as a public footway any way not previously so adapted; such person shall make an application in writing to the	

LONDON BUILDING ACT 1894, PART II.

Council for their sanction thereto and such application shall be accompanied by plans and sections and such particulars in relation thereto as may be required by printed regulations issued by the Council and the Council shall forthwith communicate every such application to the local authority and no person shall commence to execute any such work without having obtained the sanction of the Council.

Section 12.—In any case where it is intended—

(*a*) To form or lay out any street not being within two miles of Saint Paul's Cathedral for carriage traffic;

(*b*) To adapt or permit to be used for carriage traffic any street or way (not being within two miles of Saint Paul's Cathedral) not previously so adapted;

and the Council shall deem it expedient in the public interest that the street or way should by reason of its length or importance or in consequence of its forming or being so situate as to be likely to form part of an important line of communication or for other sufficient reason be of a greater width than forty feet clear they may make it a condition of their sanction that the street or way shall be throughout or in such part as they may direct of a greater width than forty feet but nothing in this section shall authorise the Council to require a greater width than sixty feet:

And before requiring that any street or way shall be wider than forty feet the Council shall give notice of their intention to the local authority in order that the local authority if they think fit may make a representation to the Council.

Section 15.—In any case where—

(1) The Council under this Part of this Act make it a condition of their sanction to—

(*a*) the formation or laying out of any street for carriage traffic over land which either at the commencement of this Act or at any time within seven years previously has or shall have been occupied by buildings or by market gardens; or

(*b*) the adaptation or use for carriage traffic of any street or way not previously so adapted or used

that the street or way shall be throughout or in any part of a greater width than forty feet; or

(2) The Council determine that the prescribed distance from the centre of the roadway shall be greater than twenty feet;

the Council shall be liable to pay to the owner of land or buildings required for such greater width or such greater prescribed distance compensation for the loss or injury (if any) sustained by him by such requirement. The amount of such compensation if not agreed within two months from the time of such condition being made or determination arrived at may (unless the Council waive the condition or determination) be recovered in a summary manner except where the amount of compensation claimed exceeds fifty pounds in which case the amount thereof shall be settled by arbitration according to the provisions contained in the Lands

LIVERPOOL CORPORATION, &c., ACT 1908.

Section 4 (4).—If the Corporation determine that main thoroughfares or continuations of main thoroughfares or means of communication between main thoroughfares in the city or main approaches or continuations of main approaches or means of communication between main approaches to the city (hereinafter in this section called main communications) will be necessary upon such estate or lands such main communications as so determined shall be shown on the plans to be furnished to the Corporation under the last preceding sub-section (relating to general scheme for the development of estates) and the land required for the formation thereof shall be defined by posts and rails or otherwise as the Corporation may allow and dedicated to the public before the formation or widening of any such street or adaptation of any road footpath or way so as to form such street is commenced or proceeded with.

Section 6 (1).—Whenever application shall be made to the Corporation to approve the formation of a new street on any estate or lands it shall be lawful for the Corporation to require that the new street shall be formed of such width as the Corporation shall require.

Provided that in the event of the Corporation requiring any new street to be of any greater width than the following (hereinafter in this Act called "the prescribed width") viz.,

(*a*) In the case of a new street which in the opinion of the Corporation will form a main thoroughfare or a continuation of a main thoroughfare or means of communication between main thoroughfares in the city or a continuation of a main approach or means of communication between main approaches to the city 80 feet; or

(*b*) In the case of any other new street the width required for such street by any Act or by-law for the time being in force within the city;

the Corporation shall purchase from the owner of such estate or lands and such owner shall sell to the Corporation any additional land necessary to make such new street of such greater width as aforesaid and shall also make compensation to such owner for any loss or damage sustained by him by reason of the Corporation requiring the street to be of such greater width aforesaid.

Section 6 (4) provides that in default of agreement the amount of compensation and of any purchase money shall be determined by arbitration under the Arbitration Act 1889.

LONDON BUILDING ACT 1894, PART II.

Clauses Acts which are applicable where questions of disputed compensation are authorised or required to be settled by arbitration and for that purpose those Acts so far as applicable shall be deemed to be incorporated with this Act:

Provided always that within two months from the time of such condition or determination being made or arrived at if the amount of such compensation has not been settled before the expiration of such time it shall be lawful for the Council to waive such condition or determination Provided also that if the Council waive such condition or determination they shall pay to the owner the reasonable costs charges and expenses incurred by him in consequence of such condition or determination and in connexion with the negotiations for the settlement of the amount of compensation.

Section 19.—Whenever any applicant under Part II. of this Act for the sanction of the Council to the formation or laying out of a street or the adaptation of a street or way for carriage or foot traffic or for the certificate of a district surveyor is dissatisfied with the refusal or conditional grant of such sanction or with any condition imposed by the Council or with the refusal of such certificate as aforesaid he may appeal to the tribunal of appeal.

Grounds of refusal to sanction plans of streets.

Section 9.—In any of the cases following but in no other case (that is to say):—

(1) Where any street is proposed to be formed or laid out for carriage traffic without being of or being widened to the full width of forty feet clear or such other width as may be required under the provisions of this Act;
(2) Where any street is proposed to be formed or laid out for foot traffic only without being of or being widened to the full width of twenty feet clear;
(3) Where any street exceeding sixty feet in length or any street not exceeding sixty feet in length of which the length is greater than the width is proposed to be formed or laid out without being open at both ends from the ground upwards;
(4) Where any street not being within the City is proposed to be formed or laid out in such manner that such street will not at and from the time of forming and laying out the same afford direct communication between two streets such two streets being (where it is intended to form or lay out such street for carriage traffic) streets formed and laid out for carriage traffic;
(5) Where it is proposed to form or lay out any street not being within the City for foot traffic only and it appears to the Council that such street should not be formed or laid out for foot traffic only or that such street should be formed or laid out for foot traffic only subject to conditions;
(6) Where the street is proposed to be formed or laid out for carriage traffic with any gradient steeper than one in twenty;
(7) Where it is proposed to form or lay out any street in such manner as to be in contravention of any byelaw of the Council;

LIVERPOOL CORPORATION, &c., ACT 1908.

Section 28.—Any person deeming himself aggrieved by any order determination or requirement or the withholding of any consent or approval under this Act of or by the Corporation or by any condition attached to any such consent or approval may within 14 days appeal to a petty sessional court.

Section 29.—Any person deeming himself aggrieved by any conviction or order made by a petty sessional court may appeal to quarter sessions.

No grounds for refusal required.

London Building Act 1894, Part II.	Liverpool Corporation, &c., Act 1908.
it shall be lawful for the Council by order at any time within the period of two months after the receipt of the application to refuse to sanction or to sanction subject to such conditions as they may by such order prescribe the formation or laying out of such street for carriage traffic or for foot traffic only as the case may be provided that the Council shall within such period give notice to the applicant of such order stating fully all their reasons for such refusal or the imposition of such conditions as the case may be: Provided that if within the said period of two months the Council fail to give notice of their refusal to sanction the formation or laying out of such street or of their disapproval of any such plan or section they shall be deemed to have given their sanction thereto.	
No such power in London Building Act.	Section 12 (1).—No new street shall be laid out in the City exceeding 150 yards in length without at least one intersecting street in every 150 yards thereof, and not more than thirty houses shall be erected on either side of any such new street between any two consecutive intersecting streets. Provided that this section shall not prevent any land adjoining or abutting on any street for a length exceeding 150 but not exceeding 400 yards being used for the site of any one building or works with the outbuildings yard and approaches belonging thereto so long as there is a street at each end of the length of land so used.
Ditto.	Section 4 (3).—Whenever application is made for approval to the formation of a new street the owner may be required to furnish plans and particulars showing the general scheme for the development or laying out of the estate or land.
Ditto.	Section 6 (5).—Any additional expense in the execution of works, caused by a new street being required of a greater width than specified by the by-laws (36 feet), shall be borne by the Corporation.
Ditto.	Section 9.—Any person intending to form a new street shall mark on the plan submitted the proposed line of frontage or any house to be erected.
Ditto.	Section 10 (1).—When in the opinion of the Corporation any street is narrow or inconvenient or without any sufficiently regular line of frontage, or that it is desirable that the line of frontage shall be altered, then the Corporation may fix a line of frontage.
Ditto.	Section 14.—Should the owner and Corporation agree, that land not less than one-tenth of the estate or one acre in extent, whichever shall be the greater, shall be set apart as a garden or open space, or as a public recreation ground, the Corporation may in some circumstances relax the by-laws as to making up of streets, or the Corporation may, if they think fit, make up such street.
Ditto.	Section 17.—The Corporation may lay out with grass margins or as gardens any part of any street so long as the total width available for traffic is not reduced below 36 feet.
Ditto.	By-laws 3, 5, 6, 7.—Every new street intended for a carriage road shall be not less than 36 feet—but a *back street* not exceeding in length 33 feet may be of a minimum width of 9 feet and must be constructed for use as a carriage road—such *back street* may be a cul-de-sac if of a minimum width of 16 feet. *Back street* means a street intended solely as a secondary means of access to any building for the purpose of removing the contents of any privy ashpit &c.

9 Conduit Street, London, W., 23rd April 1910.

CHRONICLE.

The Institute Parliamentary Bill.

By Order of the Council a circular in the following terms was issued from the Institute last Saturday to all members residing in the United Kingdom :—

The new By-laws having just received the approval of the Privy Council, it is thought desirable by the Council of the Royal Institute to take this opportunity of stating the progress already made with regard to the new Bill. The Special Parliamentary Bill Committee has reached the final stages of its work, and the Institute Solicitors are now drafting the Bill. After it has been considered by the Council it will be laid before the General Body for their approval. Its objects, as defined by the Resolution of the General Meeting of 4th March 1907, are as follows :—

(1) To declare that it is in the public interest to enable the public to distinguish architects recognised as qualified by a competent authority from those not so recognised.

(2) To extend the present chartered privileges of the R.I.B.A., making it the statutory authority for the education and examination of architects for admission to the Institute.

(3) To legalise a scale of charges.

The Council desire to point out that it is now prepared to receive applications from those architects desirous of becoming Licentiates, and that, as the period for their admission expires within twelve months from 23rd March, it is essential that the earliest opportunity should be taken to secure the advantages offered.

Up to this point the response to the invitation to apply for the Licentiateship has been most gratifying. The numerous applications that are being received daily show that the action of the Royal Institute in this matter has been found acceptable by the general body of architects throughout the country.

Ernest George, *President.*
Henry T. Hare, *Hon. Secretary.*
Ian MacAlister, *Secretary.*

Town Planning Act 1909 : The Institute Committee's Recommendations to Allied Societies.

The subjoined Recommendations regarding the operation of the Town Planning Act 1909 have been drawn up by the Institute Town Planning Committee, and issued to the Allied Societies for the consideration of their Town Planning Committees :—

RECOMMENDATIONS FOR THE CONSIDERATION OF THE TOWN PLANNING COMMITTEES OF THE ALLIED SOCIETIES.

In view of the fact that local authorities feel the necessity of keeping the cost of preparing town plans as low as possible, at all events in the immediate future, it would be desirable to assist such authorities in every practicable way by means of voluntary effort.

The following suggestions are made with a view to economy in obtaining valuable preliminary information and the soundest available advice on the subject :—

1. The scale of 25-inch Ordnance should be adopted for general purposes, a larger scale being only adopted in cases of special intricacy or for small areas.

2. It is important that contour models should be prepared except where the area is practically level throughout.

It is suggested that this work might be undertaken by architectural and engineering students of universities and technical schools as part of their training, and thus be provided free of cost.

3. It would be desirable to interest voluntary effort in the various centres, so that the factors in the problem should receive thorough study by those most competent to deal with them.

4. The Allied Societies should consider how far it would be possible for local sociological, archæological, and architectural societies, the Chamber of Commerce, the Board of Education, the University, the Railway Companies, and other bodies, to appoint committees and form a joint Council to prepare preliminary studies, which, it is hoped, would focus all the best intellects of the town on the subject and thus assist in educating public opinion.

It is suggested that the first duty of such a Council should be to study the past and present conditions of the town. For this purpose the following maps, &c., would be useful :—

(*a*) A collection of old maps to show as completely as possible the past development of the town.

(*b*) A series of Ordnance Survey maps coloured to show the present conditions of the town with regard to such matters as :

(1) Degrees of density of population.
(2) Insanitary areas or areas of special poverty.
(3) Distribution of manufacturing and business areas.

(4) Parks and other open spaces.
(5) Any vacant spaces available or specially suitable for extending existing open spaces or for being acquired as new open spaces.
(6) All public buildings and other places of public interest and all buildings having special beauty within the area to be dealt with.
(7) The maps should be marked to show tramways, railways, water-ways, &c.
(8) And to show the limits of possible drainage and water supply, if any.
(9) All spots of natural beauty should be marked.
(c) Geological maps.
(d) Maps of other towns similarly situated for purposes of comparison and suggestion.

5. In addition to such maps, any available information and statistics should be collected concerning:

(a) General traffic conditions and tendencies.
(b) Particulars of existing proposed and desirable railway, water, highway, and tramway facilities.
(c) Particulars of local industries and any special requirements for their encouragement and extension.
(d) Particulars of the tendencies of the town's growth, with indications afforded as to the natural lines of development.
(e) Particulars of places of special beauty or interest, historical or legendary.
(f) Particulars as to the use made of existing parks and open spaces and as to the needs of different localities in this respect.
(g) Estimates of the probable future requirements of schools and other public buildings for which sites might be arranged on the town-extension plans.
(h) Particulars of local customs and requirements affecting the desirable sizes and shapes of building plots for various purposes and hence determining the distribution and distance apart of new streets.
(j) Suggestions as to the character and treatment of new streets.
(k) Particulars of local conditions as to building materials and any other local characteristics which go to make up the individuality of the town or which specially need consideration with a view to preserving this as far as possible in the enlarged town.
(l) Particulars of modifications in the existing by-laws which it is desirable to have embodied in town-planning schemes.
(m) Rateable value per acre.
(n) Survey showing ages of property in periods of twenty years.
(o) Ownership of land in a wide area around town.

The collection and consideration of this information, while it will secure a thorough understanding of the problem, will bring out numerous suggestions of things which it is desirable to secure shall be embodied in the new town plan, and a careful record of such suggestions would be most valuable for those instructed to prepare the plan.

It is probably not desirable at first to prepare actual plans for the town extension, but a report embodying the information gained and the suggestions which after consideration are thought to be good ones, would be of value to the town and to those charged with the duty of preparing the plan, and, if the architectural profession shows itself to have a thorough grasp of the problem, it is more likely to secure due influence in the actual town planning when, at a later stage, this comes to be worked out on paper.

While bearing in mind the distinction between the powers given by the Housing and Town Planning Act and the means by which towns secure improvements in areas already built over, it is most desirable that in preparing a comprehensive general scheme urgent improvements of the latter class should be included, as the co-ordination of the existing town to its future extensions forms a part of the whole problem and must not be ignored. Indeed the future of many suburban areas depends entirely on the character of the facilities which are afforded it in regard to communications with the heart and other parts of the city.

NOTES ON POSSIBLE WORK FOR ALLIED SOCIETIES.

Seeing that the Act authorises a local authority to adopt town-planning schemes prepared by individual owners or groups of owners of land, there is little doubt that much of the town-planning work will be carried out in this way and that this should afford many opportunities for the Allied Societies or local committees of architects to give advice and suggestions, and they might well consider the circumstances of the ownership of land around their town with a view to seeing how far the work could conveniently be done by the owners of land and what suggestions could be offered to such owners. Such plans can only be adopted by local authorities after being approved in the usual form, and under the Act architects are specially mentioned among those who will have the right to be heard as persons affected by a town-planning scheme, so that they will have an opportunity both of making suggestions and of criticising schemes prepared for the development of land by local landowners as well as those which may be prepared by the local town-planning authority. The co-operation between architects who are in touch with different owners of land might quite well lead to the co-operation of the owners themselves in the preparation of schemes under this part of the Act. It is obviously a great advantage that the whole of the town-planning work in a district need not be done by the local authority, but that private owners, developing their own estates in general accord with the

scheme for the whole town, will have an opportunity of introducing variety of treatment. Local committees of architects should endeavour to secure more appreciation of the architectural side of the problem by enlisting the co-operation of owners of undeveloped land.

Prizes and Studentships 1911.

The pamphlet giving particulars of the Institute Prizes and Studentships for the year 1911 will shortly be in the hands of members and on sale at the Institute as usual. The subjects set for competition are as follows :—

The Essay Medal and Twenty-Five Guineas, open to British subjects under the age of forty.—*Subject :* "The Design and Construction of Belfry Stages and Spires in Stone or Brick."

The Measured Drawings Medal and Ten Guineas, open to British subjects under the age of thirty.—Awarded for the best set of measured drawings of any important building—Classical or Mediæval—in the United Kingdom or Abroad.

The Soane Medallion and One Hundred Pounds, open to British subjects under the age of thirty.—*Subject :* An Entrance Gateway to a Capital City.

The Owen Jones Studentship : Certificate and One Hundred Pounds, open to members of the architectural profession under the age of thirty-five.—Founded to encourage the study of Architecture more particularly in respect to Ornament and Coloured Decoration. Competitors must submit testimonials, with drawings exhibiting their acquaintance with colour decoration and with the leading subjects treated of in Owen Jones's *Grammar of Ornament*.

The Godwin Bursary : Silver Medal and Sixty-Five Pounds, open to members of the architectural profession without limitation of age.—Founded to promote the study of works of Modern Architecture abroad, and awarded for the best selection of practical working drawings, or other evidence of special practical knowledge, and testimonials.

The Henry Saxon Snell Prize : A Sum of Sixty Pounds, open to any member of the architectural profession (who may associate with him any member of the medical profession).—Founded to encourage the study of the Improved Design and Construction of Hospitals, Convalescent Homes, and Asylums for Aged and Infirm Poor. *Subject :* A Convalescent Home.

The Pugin Studentship : Silver Medal and Forty Pounds, open to members of the architectural profession (of all countries) between the ages of eighteen and twenty-five.—Founded to promote the study of the Mediæval Architecture of Great Britain and Ireland, and awarded for the best selection of drawings and testimonials.

The Arthur Cates Prize : A Sum of Forty Guineas, open to British subjects who have passed the R.I.B.A. Final Examination at one sitting during 1909 and 1910.—Awarded for the best set of testimonies of study submitted for the Final Examination, and for studies of Classical or Renaissance, and of Mediæval Architecture.

The Tite Prize : Certificate and Thirty Pounds, open to members of the architectural profession under the age of thirty.—*Subject :* A Design, according to the Methods of Palladio, Vignola, Wren, or Chambers, for a Campo Santo.

The Grissell Gold Medal and Ten Guineas, open to British subjects who have not been in practice more than ten years.—Founded to encourage the study of Construction. *Subject :* Design for a Skating Rink of Wood Construction.

The Ashpitel Prize : Books value Ten Pounds.—Awarded to the student who distinguishes himself the most highly of all the candidates in the Institute Final Examinations 1910.

St. Paul's Bridge.

The Times of the 14th inst. published the following letter addressed to its Editor and signed by the President, Mr. Ernest George, A.R.A., Sir L. Alma Tadema, O.M., R.A. [*H.F.*], Sir Aston Webb, C.B., R.A. [*F.*], Sir George Frampton, R.A. [*H.A.*], Messrs. John Belcher, R.A. [*F.*], Reginald Blomfield, A.R.A. [*F.*], Thomas Brock, R.A. [*H.A.*], John S. Sargent, R.A., and Hamo Thornycroft, R.A. :—

May we draw attention to the fact that a scheme for throwing a bridge across the river below St. Paul's Pier is now under the consideration of the Corporation of the City of London? This scheme when carried out will leave an indelible mark on the scenery of the river, and, according as it is handled, may be a magnificent approach to St. Paul's Cathedral or a monumental fiasco.

It is an unfortunate fact that the recent treatment of London bridges does not inspire confidence in the future of this project. Excellent pieces of engineering as they often are, they are, from the point of view of civil architecture, deplorable. Our object in writing is to urge as strongly as possible that, before any design is definitely decided upon, ample opportunity should be allowed for the expression of competent opinion and criticism of the design proposed. The Lord Mayor has announced that the cost will not fall upon the rates. With full acknowledgment of the City's generosity, we submit that that is not the point. The point of real moment is whether or not the most is going to be made of a great opportunity. We look upon London as a national heritage, and its beauty as a national asset to be jealously guarded and maintained.

Science and Architecture.

Mr. Maclaurin, the new President of the Massachusetts Institute of Technology, addressing recently the Boston Society of Architects, referred to the high degree of technical knowledge an architect of to-day must possess. "When the Massachusetts Institute opened," he said, "it served mainly as a protest against the neglect of science. Its far-seeing founder recognised that natural

science and its methods were changing everything, and that it behoved men to prepare for the coming of a new era. Science is the most effective influence in modifying the conditions of modern life. Certainly it has profoundly changed the profession of the architect. He has always needed to have some knowledge of science, but in these latter days an altogether new load is placed upon his shoulders. He has to design buildings for new purposes; he has to employ new materials; he has to work under new conditions; and the thousand-and-one new problems can scarcely be solved without much knowledge of the various branches of science. It will not do, at least in any great work, for him to rely wholly on help from other experts. A great work of art must be a unity; it cannot be made piecemeal. An architect must be an artist, however; he must have the artistic sense, and he must breathe the artistic spirit. And, after all, there is no real antithesis between science and art. The fact is being very slowly learned, but the leading men of science are becoming conscious that science after all is a great work of art. Architecture is the one branch of art that makes its appeal to everybody. Men and women may go through life hearing little of music, seeing scarcely anything of painting or of sculpture, and reading no literature at all; but they cannot well escape the influence of architecture. That influence is none the less potent because the appeal that architecture makes is silent and the response rarely articulate."

Town Planning in Greater London.

The National Housing and Town Planning Council are organising a Conference to be held at Caxton Hall, Westminster, on the 6th May next, to consider the question of Town Planning in Greater London. Invitations to attend are being sent to the London County Council and Local Authorities; also to representatives of Societies interested and to leading architects, surveyors, etc. The following Resolutions will be submitted:—

Resolution I.—This Conference desires to draw the attention of all Local Authorities in the area of Greater London possessing statutory powers under the Town Planning Sections of the Housing and Town Planning Act to the great importance of these new powers as a means of securing the wise development of the areas under their control.

Further this Conference strongly urges each Local Authority to appoint a Town Planning Committee to consider these new powers and duties.

Resolution II.—In view of the great need for securing harmonious action between all the Town Planning Authorities in the area of Greater London this Conference is of opinion that when sufficient time has elapsed to enable these Local Authorities to appoint Town Planning Committees and to consider the Reports of these Committees, the President of the Local Government Board should be asked to convene a Conference of these Local Authorities to consider joint action in regard to those features of Town Planning which affect the development and amenities of Greater London as a whole.

Other Resolutions will be placed upon the Agenda if these are sent not later than Friday morning, 29th April, to the Secretary of the National Housing and Town Planning Council, 4 Tavistock Square, W.C.

Architectural Copyright.

A case recently reported shows the manner in which the Courts of Belgium sustain the right of the architect to the copyright of his design. The plaintiff, M. Acker, an architect, had designed an apartment house, 381 Avenue Louise, at Brussels, and M. Abbeloos, the defendant, had copied the façade in two other houses, 238 and 240 Avenue Albert. The Court condemned the defendant to pay the plaintiff 2,000 francs damages and the costs of the action, and ordered the judgment to be printed in three newspapers, and reserved to the plaintiff all rights as to signatures on the façades counterfeited by the defendant.

The "Art Journal" for April.

The *Art Journal* this month has matter of special interest to members. Mr. Ernest George's work in the realm of art furnishes a theme for an article by Mr. Rudolf Dircks devoted more especially to the President's masterly handling of water-colour. Of the sources of his inspiration the writer says: "As other artists have chosen mountain, woodland, or stream for their subjects, Mr. George has chosen the habitations of man, chiefly of later mediæval times. What others have seen in nature, its composition, colour, and atmosphere, he has found in bits of odd thoroughfares, in the form and texture of a building or a bridge, in ancient gable, tourelle, or dormer, in the decorated surface of a façade." Mr. George's drawings come out remarkably well in the process employed for their reproduction in the *Art Journal*, and the sixteen examples given as illustrations convey a very good idea of his powers. "Auxerre," printed on plate-paper in ink of a brownish tint, makes an effective frontispiece. The same number has an article on "Decorative Woodwork," in which are presented some interesting interiors in woodwork designed by Mr. W. H. Brierley [*F.*], Mr. G. L. Sutcliffe [*A.*], and others.

A Poster Competition.

Messrs A. & F. Pears, the soap-makers, are offering a first prize of twenty guineas and a second of five guineas for the two best designs in colour for a double royal poster exploiting the residential and other attractions of the town of Richmond, Surrey. Competing designs marked with cipher

or motto for identification must be sent to the Secretary of the Richmond Town Advancement Association, 1 The Little Green, Richmond, Surrey, not later than the 21st May next. All designs sent in will be exhibited in the Town Hall during the coming summer.

Obituary.

Sir William Quiller Orchardson, R.A., who died on the 13th inst., had been for nearly thirty years an Honorary Associate of the Institute. Born in Edinburgh in 1835, of Highland descent, he studied at the Trustees' Academy in Edinburgh under Robert Scott Lauder, came to London in 1863, and a year or two afterwards won a £100 prize at the French Gallery for his picture "The Challenge." He was made an Associate of the Royal Academy in 1868, and was promoted to full rank as Academician in 1877. His most popular works have been "The Queen of the Swords" (1877); "A Social Eddy" (1879), the first of that series of modern society dramas which included the famous "Mariage de Convenance"; "Hard Hit" (1879), reported to have fetched some £4,000 at Christie's two years ago; "Napoleon on Board the Bellerophon" (1880), now at Millbank, and "Napoleon dictating his Memoirs." "Voltaire," exhibited in 1883, was bought by Mr. Schwabe for the gallery that he afterwards presented to the city of Hamburg. Sir William Orchardson was an equally successful portraitist, and the Institute possesses a particularly fine example in the portrait which hangs in the meeting-room of the late Mr. Alfred Waterhouse, R.A., painted in 1892.

William Owen, of Warrington, who died on the 5th inst., was elected Associate in 1872, Fellow in 1889, and was transferred to the list of Retired Fellows in 1908. He was the architect of many buildings in and about Warrington, and designed the model village of Port Sunlight for Lever Brothers Limited. His son, Mr. Segar Owen, is a Fellow of the Institute.

The death through an accident of Mr. Lionel Gordon Detmar [*A.*] at the age of thirty has cut short a career of no little promise. Articled to his uncle, Mr. W. Hilton Nash, he passed the three examinations of the Institute and became an Associate in 1901. He studied at the Architectural Association and at the Royal Academy, and carried off the former's Travelling Studentship in 1902. Having completed his articles, he worked for a year under Mr. John Belcher, R.A., and subsequently with Mr. Leonard Stokes and Mr. James S. Gibson. He afterwards became associated in partnership with Mr. Theodore Gregg, of 1A St. Helen's Place. He designed the French Applied Arts Palace at Shepherd's Bush, carried out work for the London City and Midland Bank, and had just completed the large skating-rink in Maida Vale. Some country houses erected from his designs display marked talent.

Walter Edward Mills, of Banbury and Oxford, whose death occurred on the 17th April, was elected an Associate of the Institute in 1882. He was the architect of the church-house and the enlargement of the Union, Banbury; schools at Woodfordhalse, Northants; the rectory and the restoration of the parish church, Moretonhampstead, with new roof, reseating, &c.; and premises in Banbury and the neighbourhood. A few months ago Mr. Mills was appointed architect for the erection, at a cost of some £12,000, of additions to the Union Society's buildings, Oxford University.

ALLIED SOCIETIES.

Liverpool Architectural Society.—At a recent meeting of the Society the following resolution was passed on the motion of the President (Mr. T. E. Eccles [*F.*]): "The Liverpool Architectural Society desire to express their appreciation of the help that Mr. W. H. Lever has again given to the art of architecture by his recent and noble gifts to the University of Liverpool, in providing the School of Architecture with a home in the old Blue Coat Hospital, thus preserving a most interesting building to the city, and founding the Chair of Civic Design."—The *Building News* of last week has an article by Professor C. H. Reilly [*F.*] giving a description of the University's newly acquired building, together with a plan and a view of the exterior.

Royal Institute of the Architects of Ireland.—The question of a memorial to the late Sir Thomas Drew was under consideration at a special meeting of the Council last Monday, and it has been resolved to erect a memorial brass in Christ Church Cathedral. The cost will be defrayed by subscriptions among members of the Institute.

MINUTES. XII.

At the Twelfth General Meeting (Ordinary) of the Session 1909-10, held Monday, 18th April 1910, at 8 p.m.—Present, Mr. Ernest George, A.R.A., *President*, in the Chair; 33 Fellows (including 12 members of the Council), 37 Associates (including 2 members of the Council), and several visitors—the Minutes of the Meeting held Monday, 4th April, having already been published [p. 468] were taken as read and signed as correct.

The decease having been announced of Sir William Quiller Orchardson, R.A., *Hon. Associate*, a vote of sympathy and condolence was passed to his relatives.

The decease was also announced of William Owen, *Retired Fellow*; and of Lionel Gordon Detmar, *Associate*.

The following Associates attending for the first time since their election were formally admitted by the President—viz. Arthur Francis Bryan and George Marrison Stone.

A Paper by Professor W. R. Lethaby [*F.*], entitled The Architecture of Adventure, having been read by the author and discussed, a vote of thanks was passed to him by acclamation.

The proceedings closed and the Meeting separated at 9.55 p.m.

Parliamentary Bill Committee.

At the special request of his colleagues Mr. Edwin T. Hall has withdrawn his resignation from this Committee.

JAMES BROOKS [*Royal Gold Medallist*]: A MEMOIR.

By J. Standen Adkins.



ST. MICHAEL'S, COPPENHALL, SHOWING THE NEW CHANCEL AND TRANSEPTS BUILT ON TO THE OLD NAVE AND TOWER.

THE village of Hatford is situated in Berkshire, about three miles from the banks of the Thames, which, here known as the Isis, divides the county from Oxfordshire, and a like distance from the quaint old town of Faringdon. In the ancient church is the monument of Sir Robert de Hatford, the original lord of the manor, from whose family it passed to Alice, daughter of the poet Chaucer, or, according to another account, to one Thomas Chaucer, a person of some standing in the county in the first half of the fifteenth century, generally assumed to be a son of Geoffrey, though apparently without sufficient evidence. Subsequently the manor passed by marriage to the De la Poles, then reverted to the Crown, and was next vested in the Pusey family of the adjoining village of Pusey. Pusey House passed by marriage to the Bouveries, who, however, assumed the name of Pusey, and here in 1800 was born Edward Bouverie Pusey, who was destined to become in the future an intimate friend of, and to exercise a considerable influence over, a youth who was born at Hatford a quarter of a century later.

John Brooks, farmer, married a daughter of Avery Tyrrell, of Sutton Wick, near Abingdon (brother of the Rev. James Tyrrell, vicar of the adjoining parish of Drayton), and resided at Hatford in a house still standing, but now converted into stores, where their son James was born on the 30th day of March 1825.

That the boy as he grew up would be initiated into the mysteries of farming and become his father's right hand, and eventually his successor, appeared most certain, for Hatford was not a go-ahead village, and the inhabitants were, as a rule, content with their lot, living the lives and dwelling in the homes of their forefathers from generation to generation, with little to vary the monotonous routine; even the number of the inhabitants fluctuated but little at that time and stood at something over a hundred from the first years of the nineteenth century to nearly the end, but has now fallen to less than a hundred. Brought up in such an environment, it appeared most unlikely that the name of James Brooks would ever be known far from the place of his birth, or that it would become distinguished in any science except that of agriculture or in any art but that of rearing cattle; but it was the unexpected which came to pass, for his was a mind which could not be content with the dull monotony of work on the farm, and at an early age he showed a disposition towards mechanical science, which made it appear likely that he would eventually devote himself to

some branch of engineering. One of his early exploits was the dissection of his first watch, not an unusual performance for a youth possessed of an enquiring mind, but there was this difference from the usual sequel to such investigations, that the watch was successfully reconstructed on this occasion, and was again and again taken to pieces, cleaned, and kept in order by its young owner whenever necessary.

After receiving his education at Abingdon Grammar School he began to assist his father, who had removed to the Manor, Wantage, about a mile from the town. Here at the foot of the Berkshire Downs he led a retired country life, and was distinguished by his cross-country riding, the excellence of his shooting, and his great personal strength and activity; nor was the activity bodily only, for while engaged in farming his mind turned to the improvement of the mechanical appliances of the work, and he effected useful improvements in the plough and thrashing machine.

However, in spite of the interest and relaxation provided by such exercise of inventive power, the agricultural life did not satisfy the aspirations of the young man, and friendships which he formed at this period with the Vicar of Hatford and with Dean Butler (at that time Vicar of Wantage) gave his ideas a fresh direction, and so stimulated his ambition that soon after attaining his majority he departed for London, determined to seek his fortune in new environment and in a new vocation.

It is not certain whether when James Brooks came to the metropolis in 1847 he had actually chosen his future profession. On the one hand it appears that he had already developed advanced ideas on matters ecclesiastical, and this, coupled with the advice of his clerical friends and his own intense religious feeling, no doubt gave him a bias towards church architecture, but on the other hand his former achievements had all been mechanical and he had never received any instruction in drawing. However, whether as the result of want of opportunity for entering an engineer's office or of deliberate choice, he became a pupil of Lewis Stride, F.R.I.B.A., and from this time devoted himself earnestly to the study and practice of the profession in which he was destined to achieve such marked distinction.

Now followed a period of hard work and hard study, for the embryo architect had not only to acquire a knowledge of office routine and practice, but also much that in the ordinary course would have been picked up before the commencement of pupilage. This was especially the case with the art which is so necessary as the medium for expressing the designer's ideas, for although no doubt he had used his pencil to convey his intentions in connection with the mechanical inventions which he had produced, he had not attained any facility in sketching, and his early attempts were decidedly timid and unpromising. Work in Mr. Stride's office appears to have been exacting, and afforded little leisure for study or relaxation, and time for study had to be gained by early rising and sitting up late, and even such opportunities appear to have been frequently encroached on by work for other architects.

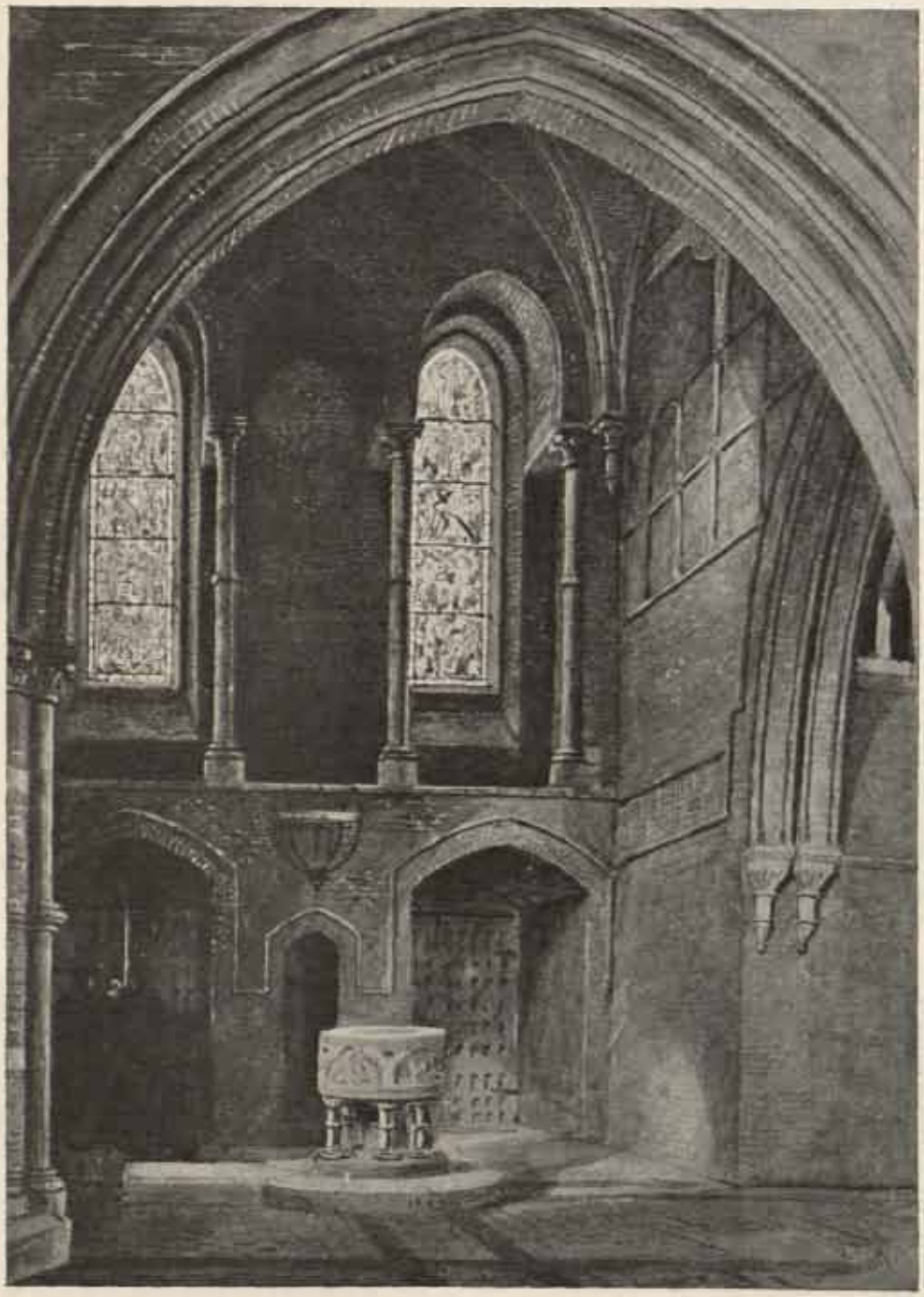
However, in the year following his arrival in London James Brooks commenced attending Professor Donaldson's lectures at University College, and took down copious notes, which were sometimes carefully re-written afterwards in a very minute and neat hand, such as would scarcely have been expected from a youth of such sturdy build and vigorous habits; and it may here be remarked that some of his earliest architectural designs were in close correspondence with this handwriting, painfully neat, drawn to a minute scale, and with a commonplace respectability in marked contrast to the masculine vigour and boldness of treatment which were afterwards typical of his best work.

On the 26th April 1849 he was admitted to the Antique School of the Royal Academy, and shortly after appears to have taken charge of the work of the office of Frank Cross, still continuing to work with Lewis Stride and to attend Professor Donaldson's lectures. After nearly two more years of "grind" new responsibilities were added, and the first step to success taken by the advent of the "first job" carried out on his own account. This was the rebuilding of a shop front in the High Street of Stoke Newington. The contract, amounting to £58, was signed on 22nd January 1851, and the work was finished by the end of May at a total cost (some extra work having been added) of £79 1s. 5*d*. The next commission was a house of moderate size at East Hendred, Berks, in the Italian villa style of the period, built of brick with Bath stone dressings. Shortly after an office was established at No. 6 Bloomsbury Square (soon afterwards renumbered as 5), a house distinguished as a former residence of Isaac Disraeli, but perhaps more interesting in the present connection as the residence and office from 1842 to 1851 of Brooks's distinguished contemporary Ewan Christian.

During the remainder of the decade commissions came somewhat sparsely, and consisted mainly of small houses in the young architect's native county, so that there must have been much unoccupied time so far as his own practice was concerned, which afforded opportunity for study, and for enlarged experience gained by occasional assistance to other members of his profession. Nor were his thoughts devoted to matters architectural only, for this period witnessed his marriage to Emma, daughter of J. Martin, of Sandford House, Oxford; and the birth of his eldest son and future partner, James Martin Brooks, 17th April 1859. At this time he resided at Acre Lane, Brixton, which had not then lost its rural character.

It was not till the year 1860 that the opportunity occurred for undertaking work in the domain of ecclesiastical architecture with which he was

hereafter to be so intimately associated, and this first effort was not on behalf of the Church to which he was so warmly attached, but for the Baptist community of Wantage. This chapel, erected in Mill Street at a cost of £1,000, was "Early Decorated" in style, correct in detail, and well proportioned, and gave evidence of careful study and realisation of the spirit of mediæval work. Before the conclusion of the year he was on more congenial ground, and the contract was signed for a small



ST. COLUMBA'S, HAGGERSTON: BAPTISTERY.
From a water-colour drawing by Axel H. Haig.

mission church in the parish of St. Mary, Haggerston, and in the following spring he was engaged on considerable alterations and additions to the parish church. Next followed schools for the same parish, a temporary mission church at Plaistow, and a "Gothic" parsonage house at Wantage.

Having passed the earliest years of his life in the immediate vicinity of the birthplace of Dr. Pusey it was not unnatural that James Brooks should have been strongly influenced by the great Churchman, and that in after life an intimate friendship should have resulted, and that soon after his arrival in London he should extend the circle of his friends among those of like mind in matters ecclesiastical; hence we find that he became a prominent member of a small band of High Churchmen, among whom he worked enthusiastically for the advancement of the principles which they held in common. In this circle a notable figure was Dr. Robert Brett, who was among the first to recognise the talent of their new associate, and to afford an opportunity for its development by procuring the commission for the erection of the Church of St. Michael, Shoreditch, the first of the series of East London churches on which Mr. Brooks's professional reputation so greatly depends. This church, commenced in 1863, was built over a small mission church, which was kept up and used for services in the midst of the building operations until the permanent structure was almost complete; it was designed in a somewhat earlier style than that used for the Wantage Chapel and the work at St. Mary's, Haggerston, and was modified in execution by the substitution of plate tracery in the east window for the bar tracery shown on the original drawings, but there was not yet much to suggest the characteristics of style with which the architect was afterwards for many years so closely identified. A pleasing and unusual feature was the brick and stone flèche surmounting a double chancel arch. After the erection of this church the architect continued his connection with the parish for some years in the capacity of churchwarden, and during his term of office became acquainted with Father H. D. Nihill, who came to the church as curate in 1865, and became vicar two years later. To this friendship it was owing that some time after he undertook the design for the Convent of St. Mary at the Cross, adjoining the church, and later that of St. Mary of Nazareth at Edgware, acting in respect of the first buildings at Shoreditch without payment for his services, and continuing throughout his life an earnest supporter of the good work carried on by Father Nihill, the late Mother Monica, and the devoted sisterhood among the poor and afflicted of East London.

The year 1864 witnessed the removal of the office to No. 11 Searle Street, Lincoln's Inn, and the commencement of the Church of St. Saviour, Hoxton, in which we find for the first time the distinctive character which marked the strong individuality of the best of Mr. Brooks's work, and which reached its fullest development in the course of the next three years, culminating in the Church of St. Columba, Haggerston, built in 1867, which stamped the architect as a man of original and powerful genius.

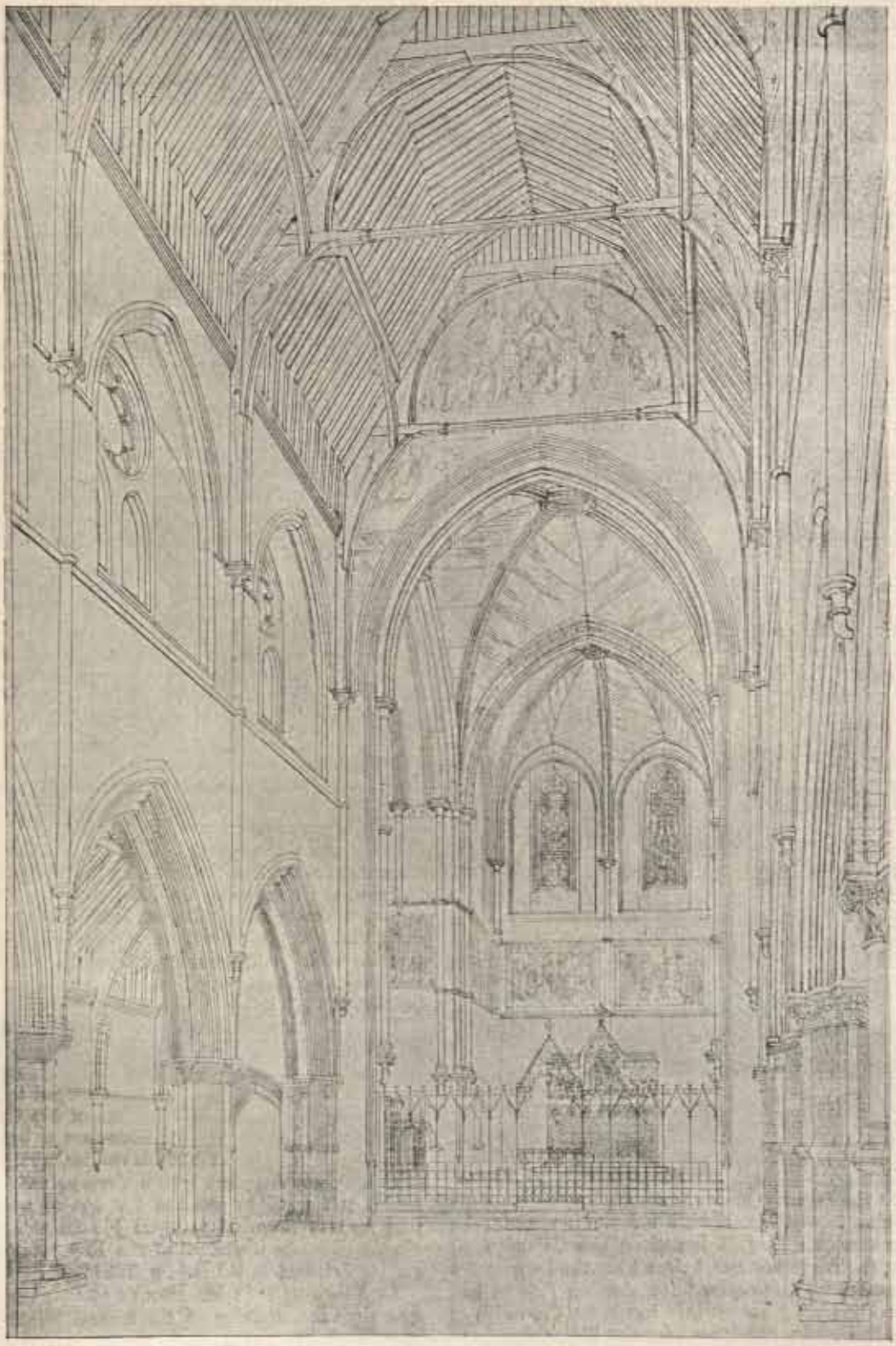
At this time Mr. Axel H. Haig, who has since earned so great a reputation for his beautiful etchings of architectural subjects, was engaged by some of the leading architects of the day to prepare illustrations of their works, and Brooks was among those who availed themselves of the talent of the young artist. In a recent letter Mr. Haig writes: "I illustrated mostly his church work, and only remember that they were among the very best Gothic designs I came across in those days, according to my then comparatively uncultivated judgment. Probably I should think so now too, in spite of the many opportunities I have since had of studying the best Gothic work in Europe."

The *Church Builder* of January 1870 devotes an illustrated article to a description of this series of buildings, and the annexed extracts well express the conditions under which they were produced and the spirit which inspired the promoter, Robert Brett, and his architect:—

> A group of churches in the East of London, designed by Mr. James Brooks, has excited considerable interest in the minds of architects, as well as of the general public, for their successful novelty, boldness, and dignity of style, combined with unusual solidity and excellence of execution, and great economy of cost.
>
> They were all required to be cheap churches, the headquarters of mission work in very crowded and squalid localities. These data involve conditions difficult to reconcile, since in the opinion of those who promoted their erection, and in the opinion of the architect himself, it is not sufficient that mission churches in squalid neighbourhoods be simple, unpretending buildings which will just afford comfortable room and shelter for the poor and ragged population of the surrounding lanes, courts, and alleys. On the contrary, in their opinion, a mission church amidst the crowded houses of a low city quarter ought to be a conspicuous building, which will overtop all surrounding buildings and keep the whole neighbourhood perpetually in mind of its existence among them. Then it should be grand and dignified in its architectural effects, proclaiming to the poor ignorant people in a way they can understand that it is a house of God erected in the midst of them. Then it should be beautiful and attractive in its general aspect and its services, first to attract them to the house of God and then to give them perpetually in God's house a refuge from the meanness and squalor of their own homes and of their whole surroundings. Given these desiderata, and add to them that the church shall also be solid and substantial, and it will be understood how difficult it is to combine with them the further condition that it shall be cheap.

In an article on "Der neuere protestantische Kirchenbau in England" Herr H. Muthesius refers to this period as follows:

> James Brooks hat seine Lorbeeren durch eine Reihe von vier nicht weit von einander stehenden grossen Kirchen in London bereits zu Anfang der sechziger Jahre erworben. Damals handelte es sich darum, in den dichtbevölkerten,



ST. COLUMBA'S, KINGSLAND ROAD, HAGGERSTON.
From a pencil drawing by Axel H. Haig.

im nordöstlichen London gelegenen Bezirken Hackney, Shoreditch, Hoxton und Haggerston der Kirchennoth durch eine Reihe von Neubauten abzuhelfen. Dieser Plan, dessen Durchführung vorwiegend der Thatkraft eines hochherzigen Privatmannes, Robert Brett, zu verdanken ist, ist architektonisch so gut verwirklicht worden, wie es in gleichen Fällen nicht oft vorkommt. Das von dem damals noch jungen James Brooks Geschaffene gehört zu dem Erfreulichsten, was der neuere englische Kirchenbau aufzuweisen hat. Wie so oft, war auch hier gerade die in Anbetracht der geringen Baumittel nothwendige Beschränkung der Sporn zu Anstrengungen in einer besondern, der Ursprünglichkeit des Geschaffenen heilsamen Richtung. Alle diese Kirchen sind in der Architektur durchaus selbständig, sofort die Eigenart eines von vornherein ausgesprochenen künstlerischen Charakters verrathend.

The Church of St. Columba, Haggerston, illustrates its author's power; it illustrates also one of his weaknesses, an occasional want of judgment in matters of construction which resulted in partial failure on several occasions. In this instance the nave arcade was designed with circular brick piers with slender stone shafts on four sides; and as the weight of the superstructure gradually increased the compression of the joints between the courses of brickwork threw so much strain on the rigid shafts that they were badly crushed and the columns had to be renewed. In the reconstruction the brickwork was abandoned and the central pier was built up with drums of stone with sheet lead in the joints instead of mortar. The effect of the new piers was not so pleasing as that of the original ones, as may be seen by comparison with the responds in which the brick centre remains; the carving intended in the caps has never been executed, and additions have been made in the interior which would hardly have been approved by the original designer. But in spite of these disadvantages it retains a wonderful charm which places it among the masterpieces of modern architecture, few of which have caught so entirely the spirit of the mediæval designer.

The church of St. Chad, Haggerston, built at this period, possesses a charming south chapel in reference to which it is now rather curious to read in the before-mentioned article in the *Church Builder*:

> A second altar is placed in it, and it is used for the daily celebration of the Holy Communion. We are assured there is no occult intention in having this second altar, that it is simply used as a matter of convenience; there are but few people at the daily celebration; this little chapel when lighted by a few gas lights is bright and cheerful, and the worshippers are brought together in it; while it would have a cold and depressing effect if the service were performed in the great sacrarium, with no choir in the stalls and the few worshippers scattered about the great and half-lighted nave.

At the opening meeting of the R.I.B.A. for the Session 1866–67, held on 5th November 1866, the President, Mr. A. J. B. Beresford Hope, announced that the Secretary had before him the longest list of names to be proposed for election that he had ever known. First on this list came the name of James Brooks, nominated for the Fellowship. On the same evening which witnessed the election of the future "Royal" Gold Medallist the President congratulated the members on the announcement of her Majesty's permission to use the word "Royal" in the title of the Institute.

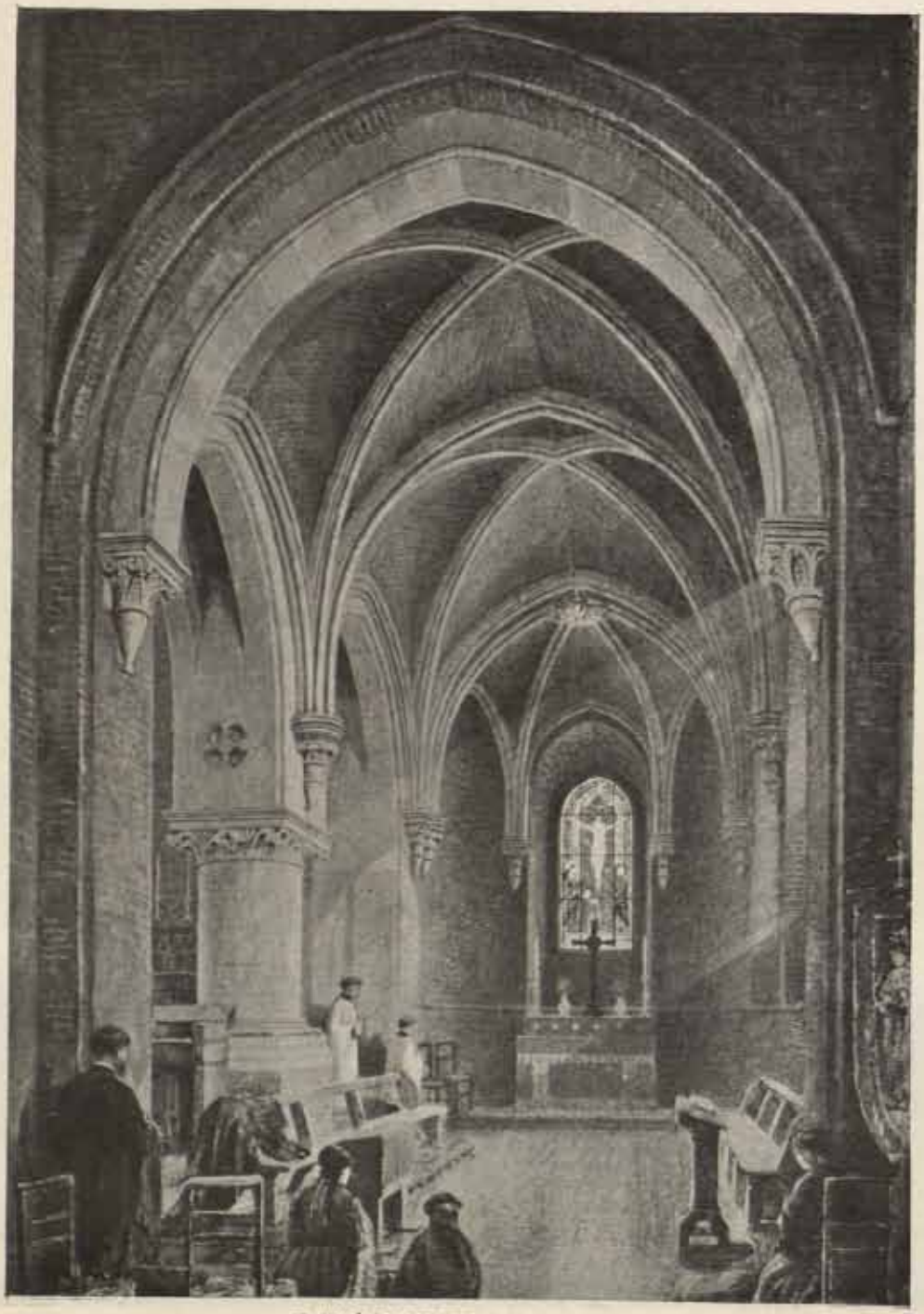
It was in the year 1875 that the practice was transferred to the offices in which it has been carried on continuously until the summer of the present year (1909). The block of buildings comprising Nos. 33 and 35 Wellington Street, Strand, had just been rebuilt, and the first and second floors occupied by the English Church Union, who were the first tenants, and a few weeks later (8th May) Mr. Brooks took possession of three rooms on the third floor, where he worked until failing health necessitated his retirement. His own workshop, which he always considered one of the best lighted drawing offices in London, was a room of moderate size with a large window facing almost exactly north and commanding a view bounded by the flank of the opera house and the dome of the Floral Hall: the walls were hung with illustrations of his works, including perspectives by Axel H. Haig and F. G. Knight; the furniture was plain and massive, some pieces being of his own design, and conspicuous among it was the large drawing board at which he himself continued to work on details and full-size sections up to the last years of his life. Everything was plain and businesslike to a degree. Probably in those days few people found any cause of complaint in the three flights of somewhat steep stairs which lead to this sanctum, least of all did its sturdy owner, though later on with advancing age and enfeebled health they became a severe strain, and were at last a bar to his attendance at the offices, as his medical attendant gave strict orders that he should not ascend them; but in these degenerate days of luxury and lifts their effect on the average client is much the same as that attributed to the "streets of stairs" of Valletta, and many, especially the younger men, reach the third story breathless and anathematising. After an existence of a little more than thirty-four years the connection of the practice with Wellington Street has been severed and the offices transferred to a more "up-to-date" building.

James Martin Brooks, the son, whose birth has already been alluded to, after receiving his early education at Wantage Grammar School, entered Merchant Taylors' School, but was obliged to leave in consequence of the development of hip disease, which necessitated a long confinement to bed and a consequent interruption of his studies, which were resumed some two years later under a private tutor; it was not until he reached the age of nineteen that he was prepared to enter his father's office. He then became a student of the Royal Academy, and was elected A.R.I.B.A. in 1881.

In February 1881 Mr. Brooks attended for the first time at a meeting of the committee of honorary consulting architects of the Incorporated

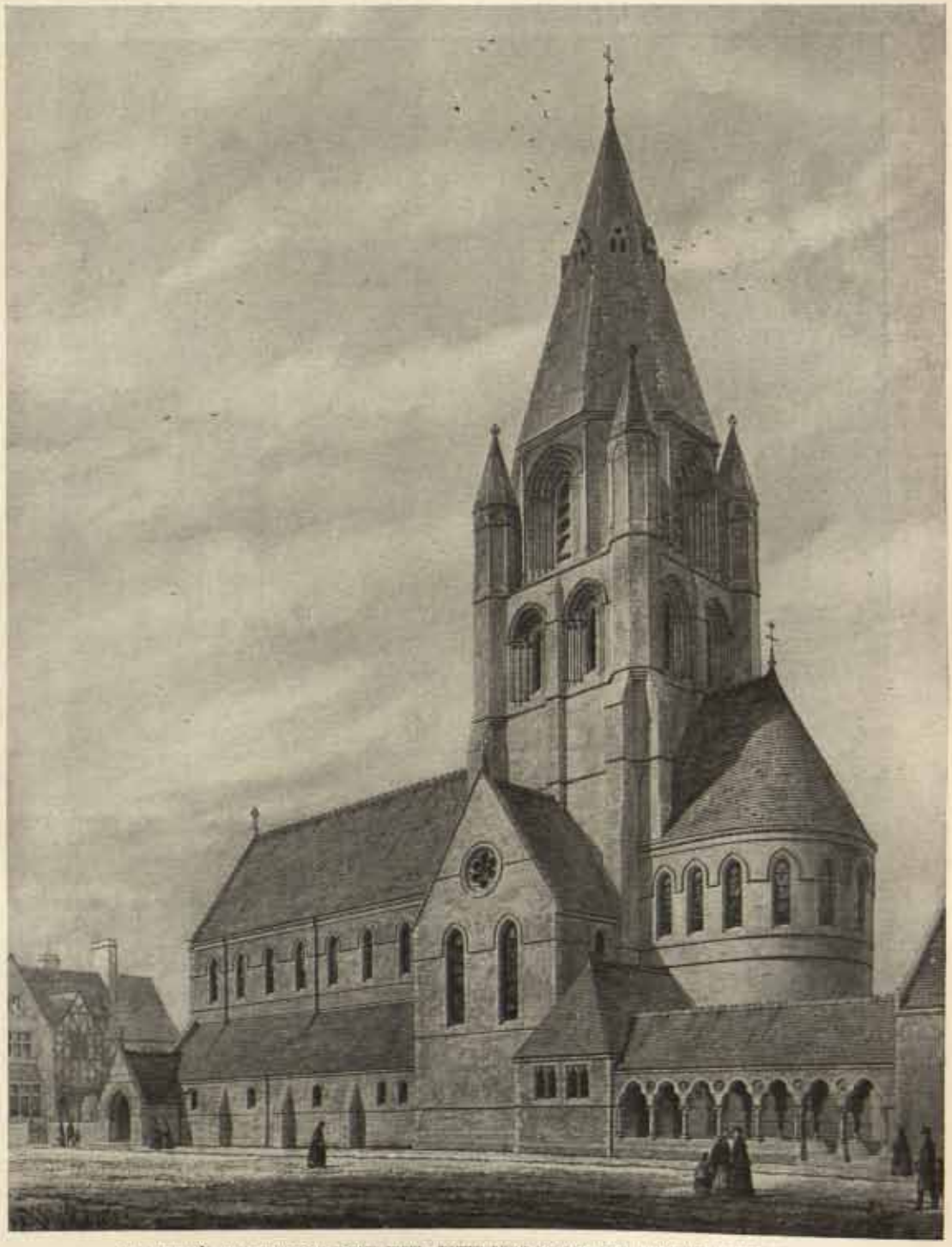
Church Building Society, having been appointed a member of that committee at the close of the previous year. His services as member, and later as chairman, were much valued by his colleagues, and the connection was continued for over twenty years, the last meeting at which he attended having been held only four months before his decease.

In 1884 Mr. Brooks was engaged on the most



ST. CHAD'S, HAGGERSTON: MORNING CHAPEL.
From a water-colour drawing by Axel H. Haig.

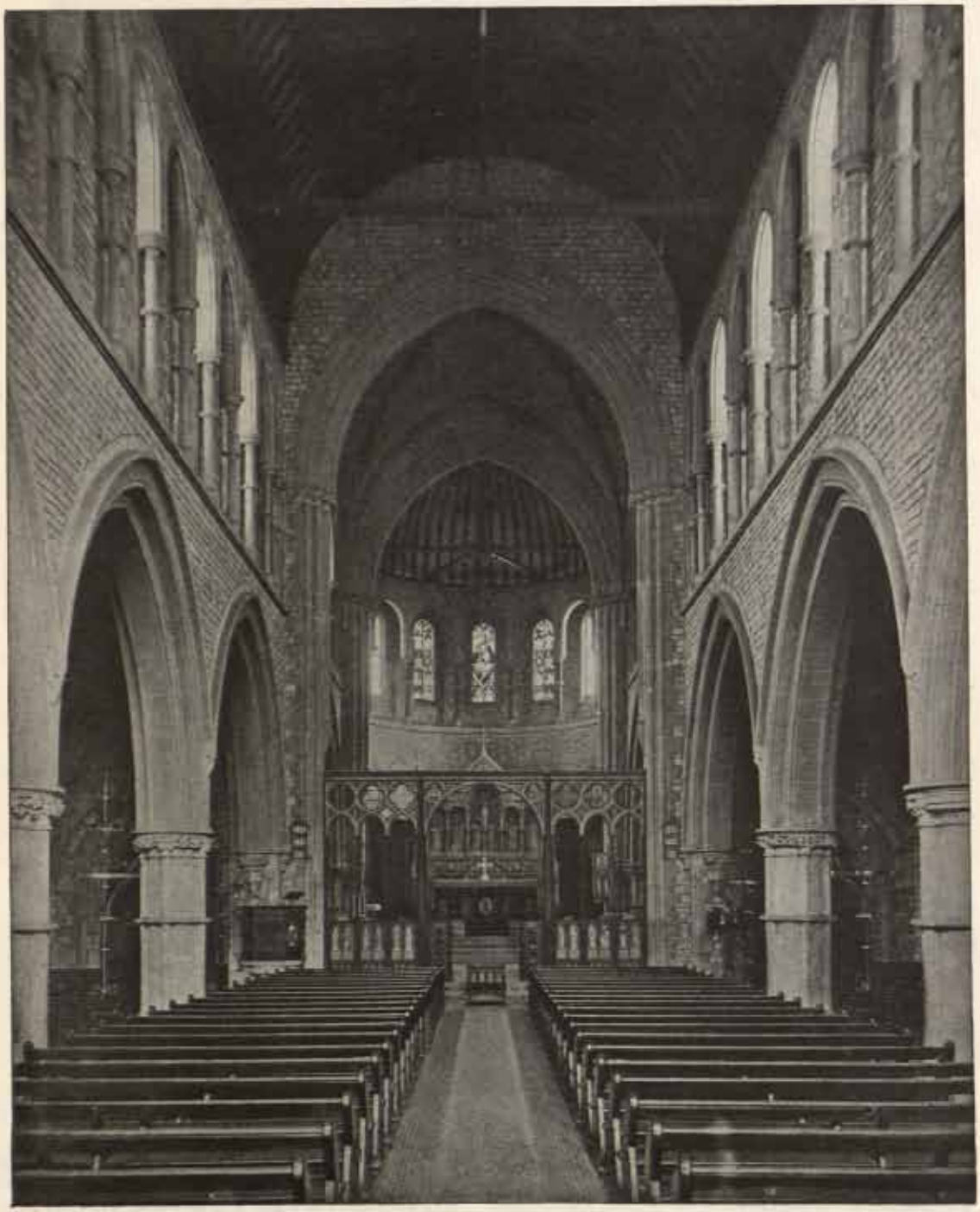
important of his works of restoration. The Church of SS. Peter and Paul, Northleach, a typical example of a Gloucestershire church of the fifteenth century, had fallen into a wretched state of dilapidation; the fine open timber roofs were in a dangerous state, and much of the walling was in urgent need of



ST. ANDREW'S, PLAISTOW: SOUTH-EAST VIEW. TOWER BUILT ONLY TO JUST ABOVE RIDGE OF NAVE ROOF.

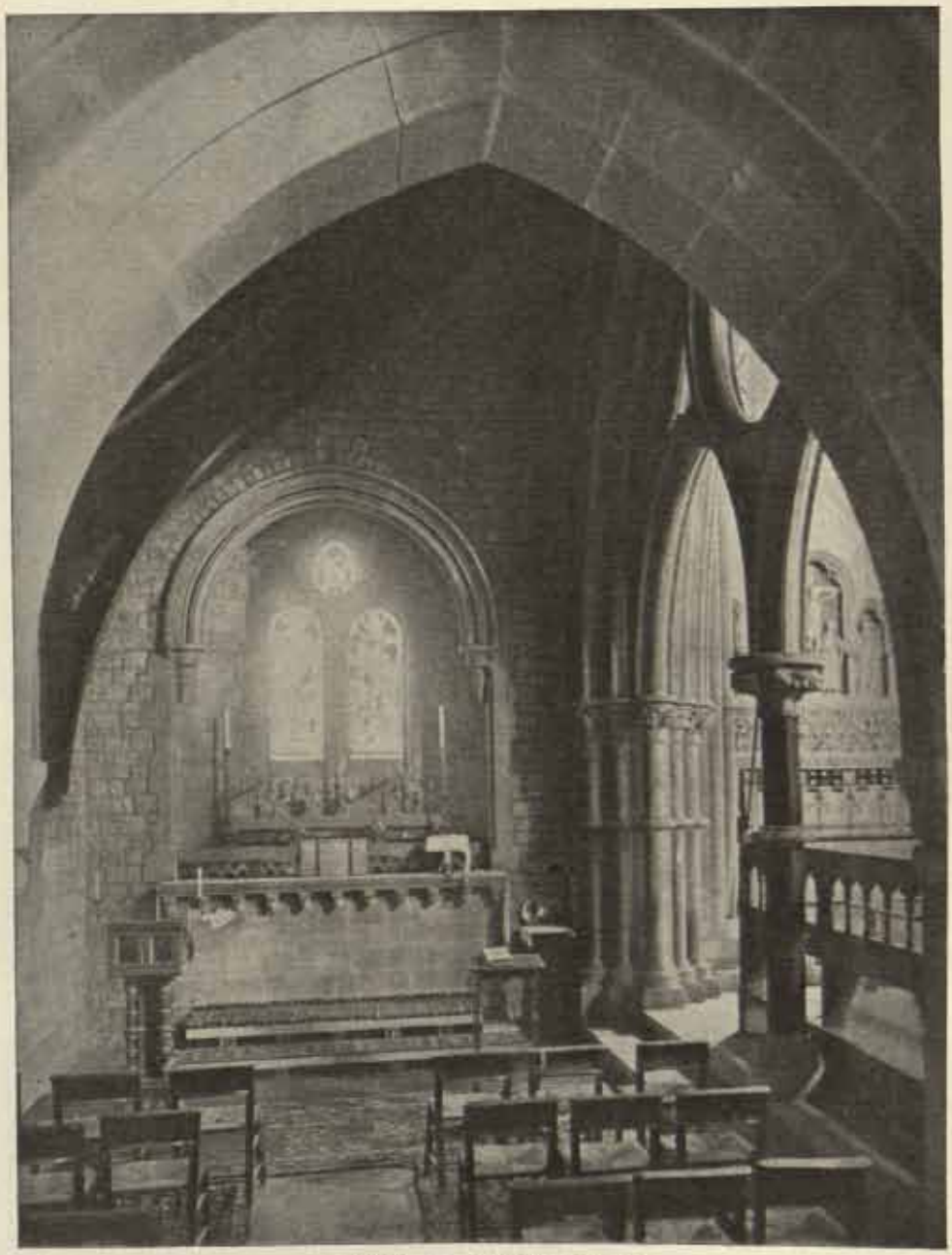
repair. The restoration was a work of strengthening and repairing rather than of design, but it is probable that the study of a later style necessitated in carrying out the work may have been the determining cause of the adoption of this style in a few of the churches designed soon after.

About the same time he was commencing the rebuilding of the Church of St. Michael, Coppenhall,



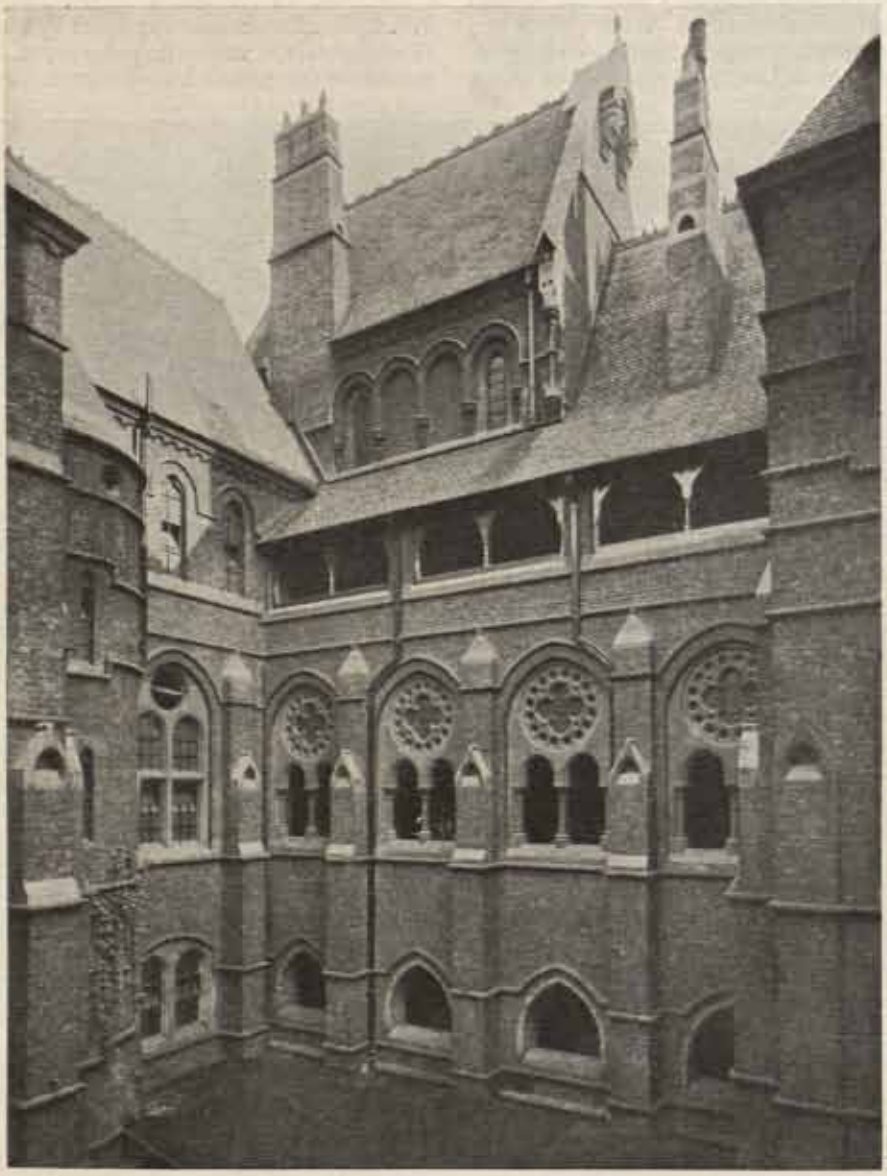
ST. ANDREW'S, PLAISTOW.

Cheshire. Coppenhall, now practically a suburb of Crewe, is the mother parish out of which that busy centre has been taken. A chapel existed in the thirteenth century, and about the year 1250 the lord of Copenhale presented it to Roger, Bishop of Coventry and Lichfield, from which date it became a chapelry of Wibunbury until it was constituted a separate benefice in 1873. Of the original edifice there is no record; it was succeeded, about the reign of Elizabeth, by a timber and plaster church of small size, of which an old view exists. This was superseded in 1821 by a small brick church, consisting of a low, long nave and chancel, with a small tower at the west end. The population at this time was 450, and the place was so out-of-the-way that a local saying asserted that when the road to London



ST. ANDREW'S, PLAISTOW: MORNING CHAPEL.

should pass through Coppenhall the world would come to an end. But when at length the railway came to the place and the world did not come to an end in fulfilment of the prophecy, the conditions of the district soon changed. Two new parishes were separated from Coppenhall under the designation of Christ Church and St. Paul, Crewe, and in spite of this the population of the old parish grew so rapidly that the small church was no longer commensurate with its needs, and in 1883 Mr. Brooks was requested to design an inexpensive brick church, of which the eastern portion could be built as a commencement, retaining the old nave until funds allowed of the erection of another section. The instructions particularly stipulated that the new building should not be lofty, but the architect, with characteristic independence, designed the church with a chancel 60 feet high to ridge, and with transepts nearly as lofty. The effect of this block rising boldly above the diminutive nave was striking and curious, but it is now gratefully acknowledged that the departure from the letter of the instructions was



CONVENT OF ST. MARY-AT-THE-CROSS, SHOREDITCH.

fully justified, and that the architect's judgment was correct in determining its proportions in consideration of the nature of the site.

Into the first competition for the new Cathedral at Liverpool James Brooks entered with great energy, the importance of the subject counterbalancing the want of sympathy with the general feeling in matters ecclesiastical of the promoters, though in conversation with intimate friends it was his custom to refer to Liverpool as "Galilee of the Gentiles." The plans, elevations, and sections ($\frac{1}{16}$-inch scale) were drawn with a delicacy and minuteness of detail most unusual in competition work, and involved a hard grind on the part of the architect, his son, and assistants. The perspective drawings in pen and ink were mainly the work of Mr. F. G. Knight, and were something of a *tour de force* in respect of rapid production. These were all made familiar after the competition by illustrations in the professional papers, but lost much of their delicacy in the reproduction. Some washed drawings of minor portions of the design were also prepared by Mr. Knight, and, as it is believed that these have not been hitherto published, two are reproduced here [pp. 510–511]. The result of the competition caused bitter disappointment, and the assessors' award was for a long time regarded almost in the light of a personal affront.

In 1888, on the death of Mr. Joseph Clarke, F.S.A., Mr. Brooks was appointed by the executors to carry on the works in progress, and also succeeded to the position of Diocesan Architect for Canterbury, rendered vacant by Mr. Clarke's decease.



CHURCH OF THE ANNUNCIATION, CHISLEHURST: CHAPEL OF ST. GABRIEL.

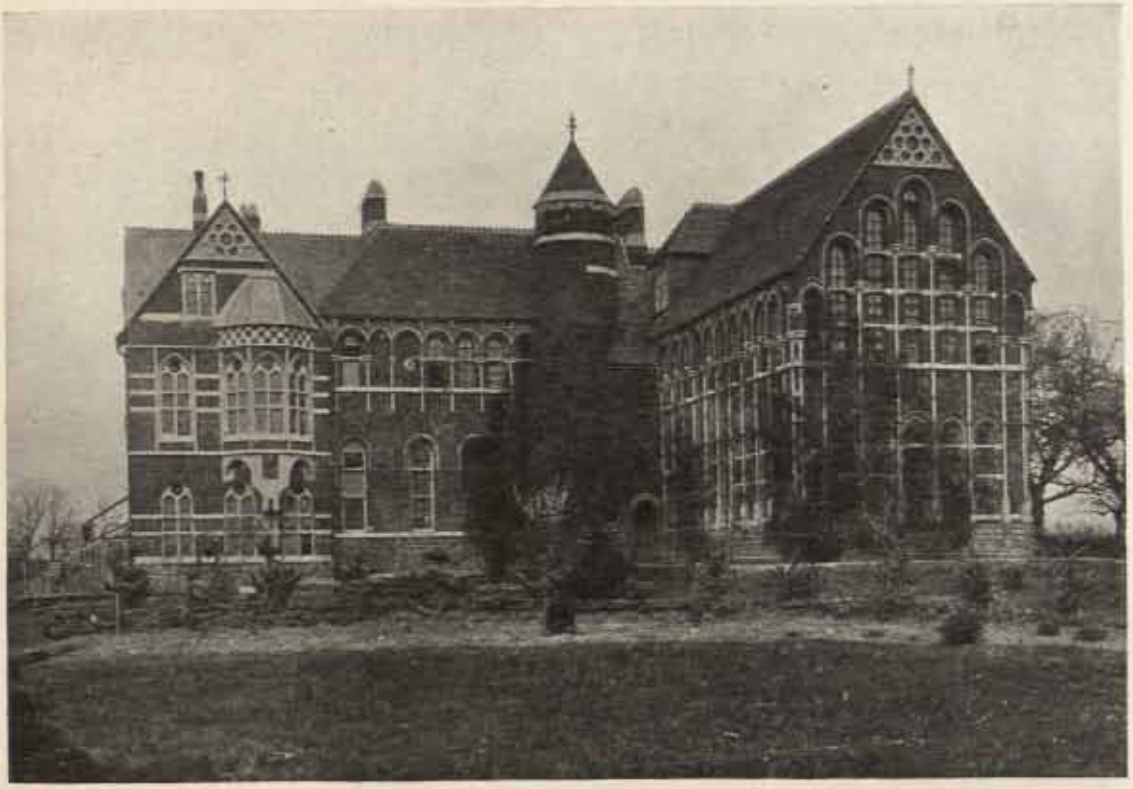
The name of James Brooks had become so entirely identified with the phase of early Gothic in which he had designed all his most successful work, that it came as a surprise, almost a shock, to those interested in church architecture when he produced his design for the new parish church at Hornsey in the style of the fifteenth century. This was the most successful of the three churches which he built in the Perpendicular style, but even in it we feel that the architect was expressing his

ideas in a language not entirely familiar, and we detect here and there the "brogue" of the earlier period.

The year 1892 was an eventful one, bringing with it a change in the constitution of the office, a severe bereavement, and an important mark of distinction accorded by his colleagues of the R.I.B.A. The first of these events was the establishment of a partnership with J. Martin Brooks as junior member, under the style of James Brooks and Son, though work was still occasionally carried out by father or son in his own name instead of that of the firm. On the 31st of August Mr. Brooks lost his first wife. At the election of officers of the Institute in June Mr. Brooks was chosen Vice-President, an office which he held until 1896. It was during his term of office as Vice-President that he was awarded the Royal Gold Medal for Architecture, which was presented at the General Meeting on the 24th June 1895. The President, the late Mr. Penrose, in his Address referred to the Medallist as follows:—

> The first and very agreeable duty which we have before us this evening is, as you are aware, that of presenting, in Her Most Gracious Majesty's name, the Royal Gold Medal to the man of your choice. He is an architect whose works fully entitle him to receive it, and we may feel the greater pleasure in conferring the honour because the recipient is one of our own Body.
>
> He commenced practice on his own account about 1852, at first—as was natural—in a comparatively humble way, but soon established for himself the career in which he has been so much distinguished, and in which he has enriched the neighbourhood of London, and also many country districts, with some of the handsomest ecclesiastical structures which have been erected during the last thirty years.

Mr. Brooks's somewhat lengthy reply was prefaced by his deprecating the idea of the recipient of the Royal Medal being expected to make a speech, and suggesting that it would be more to the purpose if he were provided with a blackboard and called upon to show his powers of sketching and designing; then followed expressions of gratitude for the mark of distinction implied in the presentation, and of hope that his future work might not be unworthy of one whom the Institute had so honoured. After some remarks on the duties and responsibilities of an architect, and the difference in the facilities for training and systematic study at that time as compared with what existed in his own student days, he said, "In conclusion I am grateful to you for your kindness in listening to a man who is not an orator, and does not pretend to say things in other than a commonplace way; but I feel strongly because I love the art which I have



CONVENT OF ST. MARY OF NAZARETH, EDGWARE.

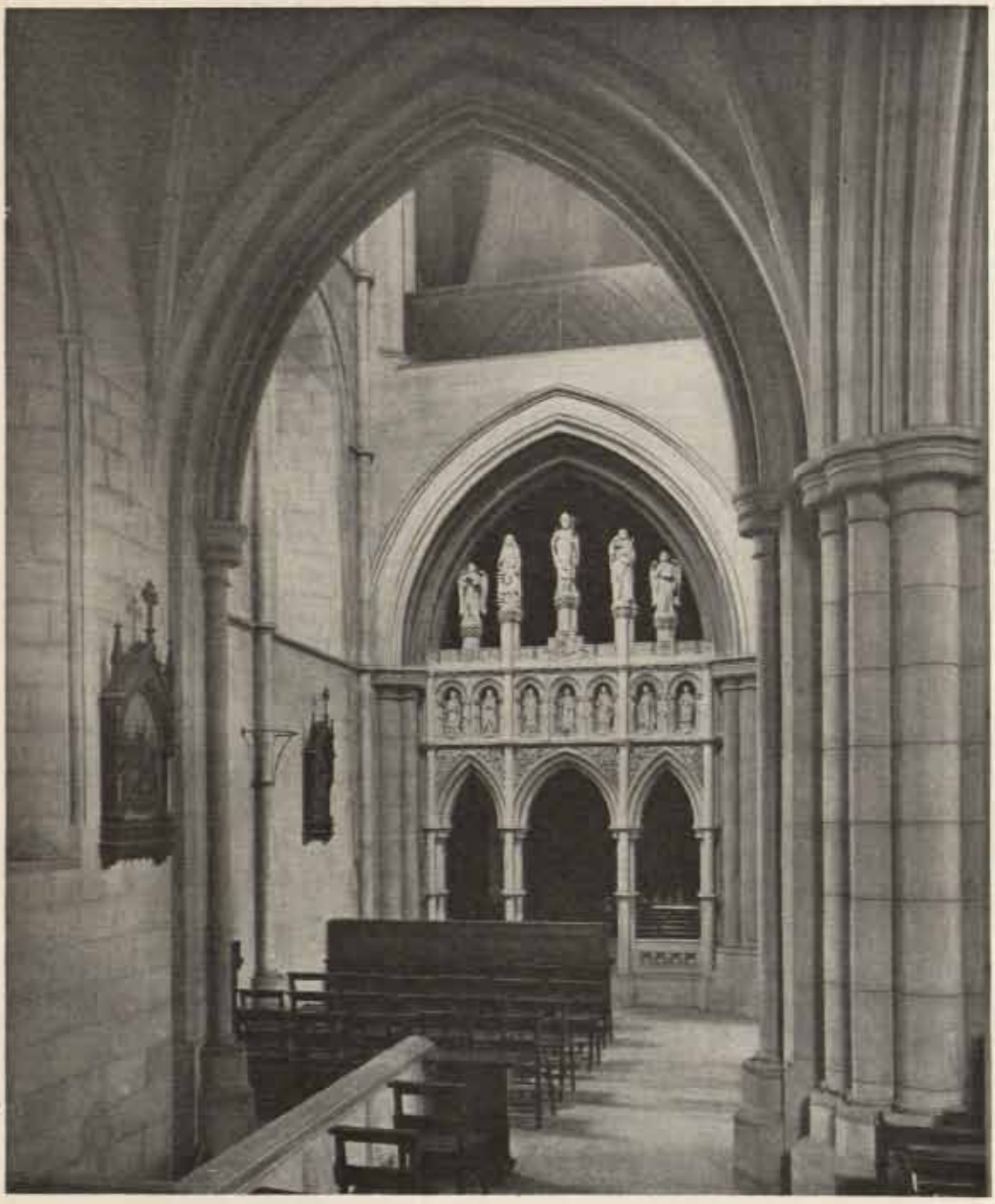
practised for so many years. I have tried to impress upon my works something of the individuality of the man who has designed and carried them out."

The parish of Charlton by Dover was possessed of a small and inconveniently situated church mainly dating from 1827, though retaining some portions of an older structure. With the growth of population this building, in spite of the possession of three galleries, became inadequate for the requirements of the parishioners, and at length it was determined to build a large new church, the funds for which were started by a generous gift of £2,000 from a gentleman unconnected with the parish. To Mr. Brooks this was a congenial task, for the parish had to him a special interest owing to its connection with his old neighbour and later friend Dr. Pusey during his suspension at Oxford. Hence it arose that he presented to the new church a handsome altar with marble mensa as a memorial to his late wife. The day for the consecration of the church arrived, the church was nearly full, when at the last moment the Bishop noticed the marble slab and required its removal before the service was proceeded with. The congregation were surprised after some delay by the entry of



ST. MARY OF NAZARETH, HODWARE: CONVENT CHAPEL.

twelve labourers, who proceeded to the altar, lifted the slab, and reared it against the chancel wall,



CHURCH OF ST. JOHN THE BAPTIST, HOLLAND ROAD, W.: VIEW ACROSS TRANSEPT SHOWING SCREEN OF NORTH CHAPEL.

replacing it by some planks laid over the frame of the altar. The service then proceeded, but the donor of the altar was so overcome by vexation and grief that he left the church before it commenced and returned at once to London. The same evening the labourers replaced the mensa on the frame, where it has rested undisturbed to the present time.

With advancing age it became impossible to give the same close attention to work, and Mr. Brooks began to consider the desirability of taking an additional partner into the firm, and after a serious illness in 1900, in consequence of which his medical attendant forbade the ascent of stairs, he determined on taking this course. Negotiations were therefore opened with a former pupil, son of the incumbent of one of the early East-end churches, who had established a flourishing provincial practice. It was at length arranged to continue the country practice in connection with the Wellington Street office, and the partnership was entered into in July 1901. From this time the head of the new firm was seldom able to attend to work, and within three months the end came. Mr. Brooks expired at his residence "The Grange," Park Lane, Stoke Newington, on the 7th October, at the age of 76 years. Many years before he had expressed a wish to be interred in the cloister garth of the convent of St. Mary of Nazareth at Edgware, and one can hardly imagine a more fitting resting-place for the body of the architect than the peaceful little God's acre in the shade of what would have been, if completed, his most important work. His epitaph might then have concluded with the same words as Sir Christopher Wren's, but unfortunately the intention was not carried out. A solemn requiem was celebrated at St. Faith's Church, Stoke Newington, with which he had been long intimately connected both as architect and churchwarden, and the interment was at Colney Hatch Cemetery.

Resolutions of condolence were passed by the leading architectural societies and other bodies connected with art and ecclesiology. The annexed extract from the minute book of the Incorporated Church Building Society, furnished by the courtesy of Mr. Joseph Monday, the late secretary, may be taken as typical of the general tone of esteem shown not only in such official resolutions, but also in numerous private letters sent at the time:—

Extract from the Minutes of a Meeting of the General Committee of the Incorporated Church Building Society, held at 7 Dean's Yard, Westminster Abbey, S.W., on Thursday, 21st November 1901, the Reverend Canon C. F. Norman in the chair:

Mr. H. W. Mozley moved, and Mr. F. H. Rivington seconded, and it was carried unanimously:—"That the Secretary be requested to write to the son of the late Mr. James Brooks, assuring him of the deep sympathy of the Committee with him and the rest of the family in the loss they have sustained, and of the high value which they placed upon the services which for so many years Mr. James Brooks rendered to the Incorporated Church Building Society as member and Chairman of the Committee of Honorary Consulting Architects."

Mr. Brooks left one daughter and three sons. The eldest son, James Martin Brooks, already referred to, died in 1903, only surviving his father two years and three weeks. The second son is a member of the Stock Exchange. The third son, Dr. W. Tyrrell Brooks, is a physician practising in Oxford, and one of the lecturers in medicine at the University.

Apart from his work in the domain of architecture James Brooks's chief interest lay in working for the advancement of the Church, and especially of the High Church. During his life he collected large sums for the building of churches in poor districts in London. He was a member of the Council of the English Church Union and a staunch supporter of the principles of that body.

He was churchwarden for many years at St. Matthias', Stoke Newington, and went through the troublous times when mobs invaded the church on account of its ritualistic services.

Subsequently he acted as people's warden at St. Faith's Church, Stoke Newington, from 1890 to 1892, and as vicar's warden from 1895 until his death. Mr. Brooks's character both as Churchman and architect, as it appeared to those with whom he was associated in these capacities, is well set forth in the annexed letter lately received from the Rev. W. Cawley Reid, Rector of Coppenhall:

27th January 1909.

The late Mr. James Brooks struck me as above all else a truly religious man. He looked at everything from the point of view of a devout Churchman. He was a convinced and pronounced believer in the Sacramental system of the Church, and desired to see the impress of that belief stamped upon all the architecture and arrangements of his churches.

He was a very hard-working man. I remember seeing him one day in his shirt sleeves working at some drawings in the foreman's office close to our new buildings. He seemed at once very thorough and very quick. He had a wonderfully active brain. His physical energy was also quite remarkable. I recollect him once when quite an old man staying a Sunday with us, and after attending our two morning services taking a long round which astonished us. I forget how many churches he had managed to see.

Once when our foreman was suggesting that, as no one could see some woodwork ornament in the chancel roof, it was quite superfluous and might just as well be omitted, he replied sharply, "But if men cannot see it, *angels can*." In spite of his advanced age, his handwriting was wonderfully firm and regular to the last. You might have to wait for an answer, but when you got it, it was always to the point.

He was a very kind man, quite conscious of his clients' difficulties in the collecting of funds, &c., and so generous at times as to be, I fear, unfair to himself. I remember how, after a long interval, I had again occasion to write to him. His reply might have come from some old friend whom one had known all one's life! There was such a ring of genuine gladness on hearing from me once more.

When he visited us for the first time, and saw the site of the old mother church at Crewe, he took in the situation at once, rightly pointing out that, even if we had to wait many years before we completed it, the new church ought to be of dignified proportions to be worthy of its position. How would he have rejoiced to see it to-day!

Another side of his character is shown in a letter from a correspondent who writes:

When I was first going in for a District Surveyorship, he said simply and quite unsolicited, "You may add my name if you like" when it was a question of testimonial. I necessarily had kindly feeling in response for kindly spirit shown frequently. There was a kind of amusement at

his being so much in request personally. "It somehow gets abroad quickly that Mr. Brooks is now in his office, and a crowd of visitors comes in suddenly." His personal attention to every detail of every work was known universally.

Mr. F. G. Knight writes as follows :—

For many years I had the pleasure of being counted amongst his few professional friends, but it was practically only in the office that we met, and then generally to discuss some projected view of one of his designs of which he had asked my assistance in making a perspective drawing. On these occasions he rarely, if ever, discussed other matters, being entirely wrapped up in his own work, and upon no single occasion can I recall his offering an unkind criticism upon the work of others. His intuitive gift was proportion, even to details, not allowing a foot rule to govern him. As he once said to me, "Design first and let the surveyor and builder do the scaling."



ST. FAITH'S, STOKE NEWINGTON.

As to method in designing he once frankly stated "I do not know how I design." In some of his earliest and best work one can almost feel that the design must have been something of an inspiration and have come almost spontaneously, but this was far from being the case in later work, which was often produced by a process of trial and rejection involving the preparation of numerous drawings many of which were cast aside long before they were completed. This was especially the case when it came to details; a drawing might be well advanced, and when inspected appear unsatisfactory, and he would then have it redrawn to a different scale, and this in turn, if still unpleasing, to a third scale, often with scarcely any modification from the original form. Very little guidance was afforded by considerations of construction, as from the want of more systematic early training, which in later life he often deplored, his methods of construction were

somewhat governed by rule of thumb, and generally received principles set aside or ignored, as when in a doorway with pointed arch enclosing a tympanum supported by a one centred segmental arch, the former was drawn with a key-stone, and the latter with a vertical central joint, or when projecting buttresses on a clerestory wall were corbelled out over the centres of the arches below. It must also be owned that he was not always ready to acknowledge a mistake when his attention was drawn to it. In one instance where a section through the morning chapel had been drawn without reference to the chancel arcade the clerk of works asked permission to raise the roof plate a couple of courses to clear the label of the arches, but was not allowed to depart from the drawing, so the plate was fixed at the level shown and the top part of the stone label was cut through in a most unsightly manner.

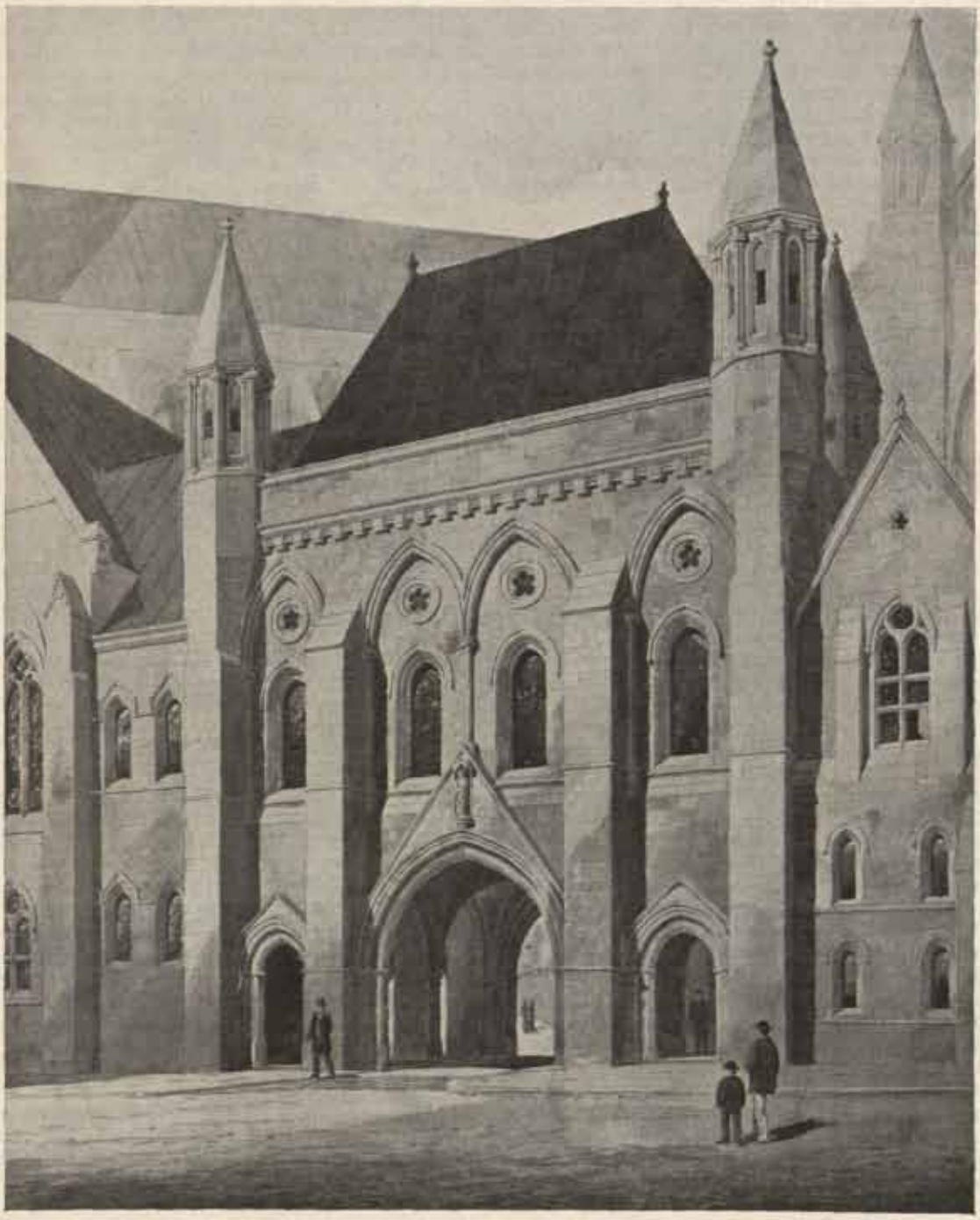
Mr. Brooks used a greater variety of scale than is generally considered desirable, and the effect of a multiplicity of scales when used in one and the same job was often somewhat confusing. General drawings were usually drawn to $\frac{1}{8}$ inch or $\frac{3}{16}$ inch



LIVERPOOL CATHEDRAL COMPETITION DESIGN: INTERIOR OF BAPTISTERY.
From a drawing by F. G. Knight.

scale, and details to every possible multiple of these scales; and as often no note was made on the drawing as to which was used, it was not always easy to determine.

Little care was taken as to keeping office records. Comparatively few letters were copied, and these were indexed on a system which made it extremely difficult to find the copy of any one which might



LIVERPOOL CATHEDRAL COMPETITION DESIGN: CONSISTORY COURT, FROM ST. JOHN'S LANE.
From a drawing by *F. G. Knight.*

be required subsequently for reference. Office diaries were numerous, but entries in them few. Mr. Brooks himself generally had two at least in each year, entries being made sometimes in one, sometimes in the other, but few in either; as an example, in the year 1885 the total number of days on which records were made was only fifty-three, counting both books, and five separate months were left blank in one and nine months in the other. Usually the record was a simple mention of the day's work, but occasionally something further is noted which throws an interesting side-light on the writer's occupations and opinions. The annexed description of a painful incident is terse and characteristic of the writer:—

1884. *July.*

25th, Friday.—To S. Leonards-on-Sea to examine the works at S. Peter's Church and to enquire into the charges made by the contractor and his men against Mr. K——, the clerk of works, a long and angry dispute—faults on both sides. D——'s men threatening to strike if I did not get rid of K——.

26th, Saturday.—Same dispute as yesterday. K—— charges Mr. D——'s son of trying to bribe him. Eventually I decided to remove K——, and send him to a church at Kensington.

August.

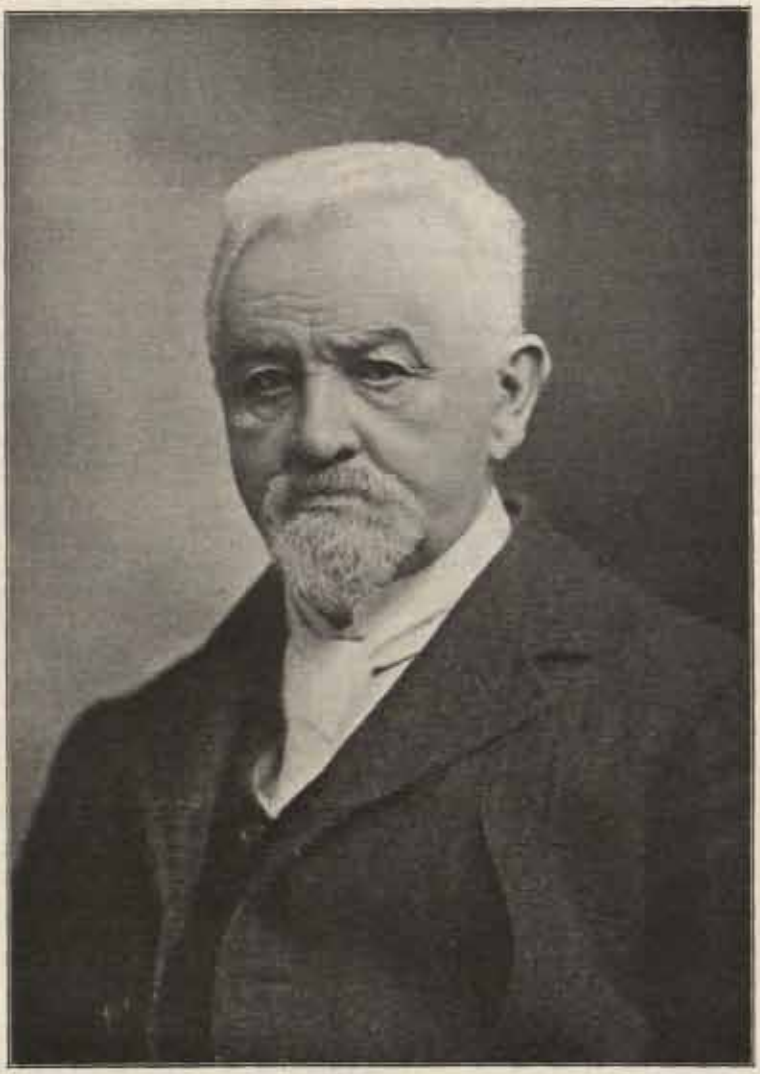
3rd, Sunday.—Early this morning poor Mr. K—— hung himself; he grieved to think he should be removed from S. Leonards. May God have mercy on him and forgive him his sins.

Mr. James Brooks's professional career, though attended with much well-merited recognition, was one of many disappointments. In spite of the general appreciation in which his work was held it was his fate to see nearly every design which he produced either greatly cut down or shorn of some important feature, and frequently even in its reduced state stopped short of completion. Of the more important works probably none was carried out more nearly as intended by its designer than the Church of St. Columba, Haggerston, the only variations being the substitution of stone for brick in the nave piers, and the omission of the carving throughout, and this church is undoubtedly the most successful of his executed works, and the one which enables us most fully to recognise the genius of its author. Probably his greatest regret was the failure to secure the opportunity afforded by competition for Liverpool Cathedral, but it is more than doubtful whether success in this matter would have added greatly to his permanent reputation. It is more to be regretted that his fine design for the conventual buildings at Edgware was not carried out in its entirety. The church alone would have ranked as his most important work, both in size and beauty, but, unfortunately, the only portion of it built was that destined in the future to form the Lady Chapel of the complete structure, which at present does duty as the Chapel of the Community. The completed church would have been a lofty and dignified fane of exquisite proportion, and in the truest spirit of mediæval art. Of the great cloister of Cistercian simplicity only one complete walk and a few bays of a second have been erected.

It was not, however, Mr. Brooks's way to waste willingly any piece of design on which he had spent thought and labour, and when an important feature, such as a tower, was cut out of one design it was preserved and tacked on to another at some future opportunity, but generally to meet with the same fate again. It militates greatly against the usual theories of design for special purposes, and speaks volumes for Mr. Brooks's powers of adaptation that he was enabled to use the same design for a tower with scarcely any modification in such dissimilar positions as (i) the central tower of a cruciform church standing in a fairly open position on a level site; (ii) the western tower of a church standing in a London street; and (iii) a tower separated by a narrow lobby from the south aisle of a church in an undulating country. The effect would have been almost equally good in each case, but in none has it been carried out.

Mr. Brooks's work divides itself into several periods, each of which is distinguished by the prevalence of some well-defined characteristics. Neglecting the earliest efforts in respectable commonplace distinguished even in its regulation forms by something of pleasing proportions, we find the first period of about ten years (1863-73) during which all that was best, most original, and most characteristic in his style reached its highest development. Having a profound admiration of the work of the Egyptians and Greeks he appears to have managed to import something of their spirit into his work, though his chief inspiration was, of course, drawn from the best works of the thirteenth century in France and England. The work of this period is distinguished by great breadth of treatment, largeness of detail, without, however, anything of coarseness, and a happy feeling for pleasing proportion.

The second period, extending to about 1885, is marked by less originality of treatment and a closer following of precedents, chiefly French, though this was to some extent unconscious on his part; thus in the report on his design for Liverpool Cathedral he wrote "Though guided by my study of the best examples of English architecture I have from my study of Continental work adopted *one* of its features," whereas the whole design was teeming with features drawn from French sources. The work of this period was frequently not quite successful in proportion, several of the churches especially being excessive in length compared with height and width. There was a marked loss in breadth of effect and a tendency to emphasise and unduly multiply the horizontal divisions. The best of the churches of this period, and in point of size the most important of his executed works, was the Church of St. John Baptist, Holland Road, Kensington, a large and handsome church vaulted throughout, but with no very marked originality



Yours sincerely

James Brooks

either in general treatment or detail. In some of the work of this date there was rather too much provision of a "dim religious light," often hardly to be distinguished from darkness, and the doors were not usually in accordance with modern ideas of facility of egress.

The third and last period was largely one of unrest and experiment. The Renaissance Chapel at Wynyard was as respectably uninteresting as the Italian villa of 1852, and the Queen Anne stables and hotel were not works of a high order. The "Perpendicular" churches were not a congenial task, and suggested a want of familiarity with the style, the best and most happy design being one prepared for the chancel of Plaxtole Church, Kent, in which the tracery of the east window was continued up to the angles and along the return sides by a series of panels. But there were two churches in the favourite "Early" style which showed the germ of a new development that might have led to great results. There was greater lightness of treatment, especially in the interior, and a tendency to give more importance to vertical lines and to introduce long raking lines in the buttresses. The first of these was the Church of the Holy Innocents, Hammersmith, which was practically completed; the second was All Hallows, Gospel Oak, which would have carried out the treatment more fully, but unfortunately remains in a deplorably unfinished state.

The author's sincere thanks are due to the several correspondents from whose letters extracts have been made in the above sketch, and also to the Rev. C. H. V. Pixell, the Rev. S. F. Green, the Rev. Father Nihill, and Dr. W. Tyrrell Brooks, who have afforded valuable assistance.

APPENDIX A.

List of the Principal Works carried out by Mr. James Brooks.

The dates given are in some cases those at which the designs were prepared, in others of the actual commencement of building.

1851. Shop front, High Street, Stoke Newington.
1852. House at East Hendred, Berks.
1853. Cottage at Stanford-in-the-Vale, Berks.
1857. House at Wantage.
1858. Alterations to Royal Philanthropic Society's House, Kennington Lane.
1859. House at Reading.
1860. Chapel Mill Street, Wantage.
" Mission Church, Haggerston.
1861. St. Mary's Church, Haggerston. (Alterations.)
" Mission Church, St. Andrew, Plaistow.
1862. Schools, St. Mary, Haggerston.
" House at Wantage.
1863. Church of St. Michael, Shoreditch.
1864. Church of St. Saviour, Hoxton.
" Schools, St. Columba, Haggerston.
1864. Church of St. Andrew, Sandford-on-Thames, Oxon (Restoration.)
1866. Alterations to 23, Lincoln's Inn Fields.
1867. Church of St. Chad, Haggerston.
" Church of St. Columba, Haggerston.
" Church of St. Andrew, Plaistow.
" Parsonage, St. Michael, Shoreditch.
1868. Church of All Saints, Northfleet.
" West Hannay Church, Oxon. (Restoration.)
" Church of the Annunciation, Chislehurst.
1869. Church of St. Andrew, Totteridge, Herts. (Restoration.)
1870. Convent of St. Mary-at-the-Cross, Shoreditch (first section of conventual buildings); continued at several subsequent dates.
" Christ Church, Watney Street, E. (Remodelling.)
" School, St. Michael, Shoreditch.
" School, Meysey Hampton, Gloucestershire.
1871. Church of St. Saviour, Mortomley, near Sheffield (Parkin Jeffcock Memorial); won in competition.
" Meysey Hampton Church, Gloucestershire. (Restoration.)
" National School and Master's House, Wolstanton, Staffordshire.
1872. Schools, St. Andrew, Plaistow.
" Church of St. Margaret, Marks Hill, Kelvedon, Essex. (Alterations.)
" Brewery, Wantage.
" Additions to Castle Hill Lodge.
1873. Additions to Humewood, co. Wicklow (large mansion).
" Parsonage, St. Saviour, Hoxton.
" Church of St. Stephen, Avenue Road, St. John's Wood. (Alterations.)
" Parsonage, St. Columba, Haggerston.
" Church of All Saints, Paddington. (Additions.)
" Convent of St. Mary of Nazareth, Edgware (first section of conventual buildings erected); originally styled St. Raphael's Priory. Various sections erected subsequently, but much of the original scheme not yet carried out.
1874. Church of the Ascension, Lavender Hill.
" Church of St. John Baptist, Kensington (first section). Remainder erected subsequently, except the west front.
" Church of St. James, Marston Meysey, Wilts. (Restoration.)
1875. Parsonage, St. Andrew, Plaistow.
" School, Stanford-le-Hope, Essex. (Additions.)
" School, St. Saviour, Hoxton.
" Church of St. Margaret, Lee, Blackheath. (Additions.)
1876. Epping Church, Essex. (Restoration.)
1877. Church of St. Medoc, Doune, Scotland.
" Village Hall, Chislehurst.
1878. Church of St. John, Whetstone, Middlesex. (Additions.)
1879. Private Chapel for the Marquess of Londonderry, Wynyard Hall, Durham (Italian Renaissance style).
1880. Church of the Transfiguration, Lewisham.
" Church of St. Mary, Cainham, Ludlow.
1881. Stables for the Marquess of Londonderry, Brick Street, Mayfair ("Queen Anne" style).
" Church of St. Faith, Stoke Newington (western part of Nave added to Church commenced by W. Burges).
1882. Mission Hall, St. Andrew, Willesden.
1883. Church of St. Michael, Coppenhall, Cheshire (Chancel, Lady Chapel and Transepts).
" Church of St. Peter, St. Leonards-on-Sea.
1884. Church of SS. Peter and Paul, Northleach, Gloucestershire. (Restoration.)

1885. Church of St. Andrew, Willesden.
1887. Church of All Saints, Southend.
„ Church of the Holy Innocents, Hammersmith.
„ Christ Church, Turnham Green (new Chancel).
1888. Church of St. Mary, Hornsey (Fifteenth-century style).
„ Vicarage, All Hallows, Gospel Oak.
„ Worth Church, Kent. (Restoration.)
1889. House at Rondebosch, Cape Town (for Mr. W. N. Struben, a rather florid Jacobean design much simplified in execution. The work was carried out by correspondence from the London office).
1890. Church of SS. Peter and Paul, Charlton, Dover.
1891. Church of St. Chad, Wybunbury, Cheshire (Fifteenth-century style).
1892. S.E. Railway Hotel, Deal.
1893. Church of All Hallows, Gospel Oak (Nave with temporary roof and lower part of chancel).
1895. Church of St. Barnabas, Great Tey, Essex. (Restoration and re-seating.)
1896. Church of St. Peter, Hornsey (Fifteenth-century style, western portion only).
1898. Church of St. Luke, Enfield (eastern portion only).
1899. Vicarage, St. Peter, Hornsey.
„ Vicarage, St. Luke, Enfield.
1901. St. Faith's Church, Stoke Newington (Lady Chapel).

WORKS CARRIED OUT INDEPENDENTLY BY JAMES MARTIN BROOKS.

1890. Hospital Chapel, Ilford, Essex.
„ Elementary School, Harlesden.
1895. St. Giles' Church, Killamarsh, Derby. (Additions.)
1896. Church of SS. Mary and Chad, Longton, Stafford (Chancel and eastern half of Nave).

APPENDIX B.

EXHIBITS.

Royal Academy:—
1886. Willesden, Ch. of S. Andrew. N.E. view.
1889. Liverpool Cathedral. Interior and exterior views of the Chapel of S. John.
„ Gospel Oak, Ch. of the Good Shepherd. Interior view with apse.
„ Gospel Oak, Parsonage of the Good Shepherd. View.
„ House at Rondebosch. View.
1891. Charlton, SS. Peter and Paul. View.
1892. Tonbridge, School Chapel. View.
1893. Deal, South Eastern Hotel. View.
1894. Gospel Oak, Ch. of All Hallows. E. and W. elevations.
1896. „ „ „ „ „ Interior view.
„ Willesden, Ch. of S. Andrew. N.W. view.
1897. Hornsey, Ch. of S. Peter. View.
1898. Enfield, Ch. of S. Luke. View.
1899. „ „ „ East window.

Paris Exhibition:—
1878. Schools of S. Michael and Convent of S. Mary-at-the-Cross, Shoreditch.

Sydney Exhibition:—
1879. Haggerston, Ch. of S. Chad. View of side chapel.
„ Schools of S. Michael and Convent of S. Mary-at-the-Cross, Shoreditch.

Adelaide Exhibition:—
1887. Schools of S. Michael and Convent of S. Mary-at-the-Cross, Shoreditch.
„ S. Leonards-on-Sea, Ch. of S. Peter. S.W. view.

Manchester Jubilee Exhibition:—
1887. Ch. of S. John Baptist, Kensington. Interior view.
„ S. Leonards-on-Sea, Ch. of S. Peter. S.E. view.
„ Lewisham, Ch. of the Transfiguration. N.E. view.

Chicago Exhibition:—
1893. Ch. of S. Mary, Woolwich. S.E. view.
„ Ch. of Holy Innocents, Hammersmith. S.W. view.

Glasgow Exhibition:—
1893. Tonbridge, School Chapel.

Paris Exhibition:—
1900. Enfield, Ch. of S. Luke. East window and reredos.

Saint Louis Exhibition (posthumous):—
1904. Hornsey, Church of S. Mary. View.
„ „ „ S. Peter. View.
„ Enfield, Ch. of S. Luke. View.
1904. Gospel Oak, Ch. of All Hallows. View.
„ Coppenhall, Ch. of S. Michael. Lady Chapel.

PUBLISHED DRAWINGS.

Abbreviations.—*A.*, The Architect; *A. A.*, Academy Architecture; *B.*, The Builder; *B. N.*, Building News; *B. A.*, British Architect; *B. J.*, Builders' Journal; *C. B.*, Church Builder; *W. E. M.*, West End Magazine; *Z. B.*, Zeitschrift für Bauwesen.

Charlton, Ch. of SS. Peter and Paul:—
View . . . . . *A. A.* 1891.
„ . . . . . *C. B.* April 1891.
Elevations, sections and view . *B.* 30th May 1891.
Amended design for tower section and elevation . . . . *B. J.* 2nd April 1895.

Chislehurst, Ch. of the Annunciation:—
Interior view . . . . . *B. N.* 25th Dec. 1874.
„ „ . . . . . *B. N.* 17th Sept. 1875.
Reredos . . . . . *A.* 20th Oct. 1877.

Coppenhall, Ch. of S. Michael:—
View . . . . . *B.* 17th May 1884.

Deal, South Eastern Hotel:—
View . . . . . *B.* 17th June 1893.
„ . . . . . *A. A.* 1895.

Doune, Ch. of S. Medoc:—
Triptych . . . . . *C. B.* April 1884.
„ . . . . . *W. E. M.* Aug. 1896.

Edgware, Convent of S. Mary of Nazareth:—
View . . . . . *A. A.* 1890.
„ . . . . . *B.* 17th May 1890.

Enfield, Ch. of S. Luke:—
View . . . . . *A. A.* 1898.
„ . . . . . *B. N.* 16th Sept. 1898.
East window and reredos . . *A. A.* 1899.
„ „ . . . *B.* 17th June 1899.

Gospel Oak, Ch. of the Good Shepherd (All Hallows):—
Interior View (with apse) . . { *A. A.* 1889.
{ *B.* 10th Jan. 1891.
S.E. exterior view . . . *C. B.* July 1892.
East and West elevations . . *A. A.* 1894.
„ „ . . . *B.* 29th Dec. 1894.
S.E. view . . . . . *A. A.* 1895.
Interior view (square E. end) . *A. A.* 1896.

Gospel Oak, All Hallows' Vicarage:—
View . . . . . *B.* 23rd Mar. 1889.
„ . . . . . *A. A.* 1889.

Great Tey, Ch. of S. Barnabas:—
View . . . . . *C. B.* April 1896.

Haggerston, Ch. of S. Columba:—
Exterior and interior views . . *C. B.* Jan. 1870.
Interior view . . . . . *B. N.* 19th Jan. 1872.
Exterior view . . . . . *B. N.* 28th Feb. 1873.

Hammersmith, Ch. of Holy Innocents:—
View . . . . . *B.* 1st Jan. 1887.
„ . . . . . *C. B.* April 1887.
„ . . . . . *Z. B.* 1899.

Highgate, Ch. of S. Augustine (not carried out):—
Z. B. 1899.

Hornsey, Ch. of S. Mary:—
View . . . . . *C. B.* Jan. 1888.
„ . . . . . *B.* 12th May 1888.

Hornsey, Ch. of S. Peter:—
View . . . . . *B.* 15th Aug. 1896.
„ . . . . . *C. B.* Oct. 1896.
„ . . . . . *A. A.* 1897.

Hoxton, Ch. of S. Saviour:—
Interior and exterior views . . *C. B.* Jan. 1870.
Interior view . . . . . *B. N.* 24th Aug. 1866.

Kensington, Ch. of S. John Baptist:—
S.W. view . . . . . *B. N.* 29th Nov. 1872.
West end with tower . . . *B. N.* 4th Apr. 1873.
Elevation of west end without tower . . . . . *B.* 23rd Apr. 1892.

Elevation of choir screen	*B.*	29th June 1895.
Reredos	*W.E.M.*	Aug. 1896.
Choir screen	*Z. B.*	1899.
Kensington, S. Paul (competition):—		
Interior view, elevations and sections	*B.*	15th Jan. 1887.
Kiltegan Church, Ireland:—		
New aisle and mausoleum	*B. N.*	12th Nov. 1875.
Lavender Hill, Ch. of the Ascension:—		
View	*B. N.*	29th Jan. 1875.
Lee, S. Margaret:—		
Reredos	*B. N.*	11th Aug. 1876.
Interior view	*B.*	30th June 1888.
Liverpool Cathedral	*A. A.*	1889.
" "	*B.*	9th & 16th Jan. 1886.
" "	*B.*	6th Feb. 1886.
" "	*B.*	6th Mar. 1886.
" "	*B.*	28th April 1886.
" "	*B. A.*	5th Mar. 1886.
" "	*B. A.*	2nd April 1886.
Mortomley, Ch. of S. Saviour:—		
View	*B. N.*	16th July 1874.
Northfleet, Ch. of All Saints:—		
Interior view	*B. N.*	13th Nov. 1874.
Northleach, Ch. of SS. Peter & Paul:—		
View	*B.*	6th Oct. 1883.
	C. B.	July 1884.
Plaxtole Ch.:—		
View	*B. J.*	2nd April 1895.
Rondebosch, House at:—		
View	*A. A.*	1889.
"	*B.*	13th July 1889.
Shoreditch, Convent of S. Mary-at-the-Cross:—		
Details of chapel and fittings	*B. N.*	5th & 12th Dec. [1873.
Shoreditch, Ch. of S. Michael:—		
Rood screen and candelabra	*B. N.*	28th Sept. 1866.
Southend-on-Sea, Ch. of All Saints:—		
View	*B.*	1st Oct. 1887.
Tonbridge, School Chapel:—		
View	*B.*	14th May 1892.
Plan section and elevations	*B. N.*	19th July 1895.
Willesden, Ch. of S. Andrew:—		
N.E. view	*B.*	2nd Jan. 1886.
" "	*B. A.*	27th Aug. 1886.
N.W. view	*B.*	2nd Nov. 1895.
" "	*A. A.*	1896.
N.E. and N.W. views	*Z. B.*	1899.
Worth Ch., Kent:—		
View	*B. J.*	2nd April 1895.
Woolwich, Ch. of S. Mary (not carried out): Interior and exterior views	*B. N.*	19th Dec. 1879.



ST. PETER'S, ST. LEONARDS-ON-SEA.



REPORT OF THE COUNCIL FOR THE OFFICIAL YEAR 1909–1910.

Approved and adopted by the Annual General Meeting, Monday, 2nd May 1910.

SINCE the publication of the last Annual Report the Council have held 22 meetings, of which the Council elected in June last have held 16. The following Committees appointed by the Council have met and reported on the matters referred to them :—Competitions, Prizes and Studentships, Finance, Sessional Papers, Premises, Professional Questions, Board of Professional Defence, Board of Examiners, Fellowship Drawings, Town Planning, School of Architecture in Italy, Parliamentary Bill, Reinforced Concrete, Honorary Members, Ulster Alliance, Royal Academy Exhibition.

Obituary. The losses by death have been as follows :—*Fellows* : Richard Armstrong, Henry Dare Bryan, Alfred Burnell Burnell, John Archibald Campbell, Thomas William Cutler, Sir Thomas Drew, Henry Bayly Garling, Henry Hall, Jesse Horsfall, George Inskipp, Henry Jarvis, Nathan Solomon Joseph, John Wornham Penfold, Edward Potts, Frederick Hyde Pownall, Thomas Mellard Reade, Frederick Henry Reed, George Campbell Sherrin, Edward Shewbrooks, Henry Stock, Benjamin Tabberer, George Thomas ; *Retired Fellows* : William Owen, Thomas Worthington ; *Associates* : Lionel Gordon Detmar, Walter Edward Mills, Charles Albert Monday, Frederick Henry Williams ; *Hon. Corr. Members* : Auguste Choisy, Baron Henry von Geymüller, Osman Hamdhi Bey, Charles Follen McKim, José Urioste y Velada.

Obituary notices of some of the above have appeared in the JOURNAL.

Royal Gold Medal. The Royal Gold Medal was awarded last year to Dr. Arthur Evans in recognition of the eminent services he had rendered to the history of architecture by his distinguished work of exploration in Crete. Dr. Evans received the Medal in person at the General Meeting on the 1st November 1909, when he delivered an address illustrated by lantern slides on some aspects of his recent work in Crete.

It has been decided to award the Medal this year to Mr. T. Graham Jackson, R.A., for his executed works as an architect. His Majesty the King has graciously signified his approval of the award.

Membership. The following tabular statement shows the present subscribing membership of the Institute compared with that at the corresponding periods of 1907, 1908, and 1909 :—

Year	Fellows	Associates	Hon. Associates	Total
1907	862	1,254	46	2,162
1908	906	1,288	45	2,239
1909	888	1,344	46	2,278
1910	874	1,431	48	2,353

The number of Associates shows a considerable increase, and the Council desire to urge all Associates who are eligible to come forward and apply for election as Fellows without delay. During the official year since the last Annual General Meeting 7 Fellows have been elected, 118 Associates, and 4 Honorary Associates.

Examinations.

The Progressive Examinations were held in June and November 1909. The Preliminary was held in London, Birmingham, Bristol, Cardiff, Glasgow, Leeds, Liverpool, Manchester, and Newcastle-on-Tyne; the Intermediate in London, Bristol, Cardiff, Glasgow, Leeds, Manchester, and Newcastle-on-Tyne. The Council desire to record their thanks for the valuable services rendered by the Hon. Secretaries and Examination Committees of the various Allied Societies. The Final and Special Examinations were held in London, and Special Examinations for Colonial candidates in Johannesburg, Sydney, and Toronto. The results are shown in the following tabulated form :—

	Admitted	Exempted	Examined	Passed	Relegated
Preliminary Examination . . .	257	85	172	130	42
Intermediate Examination . . .	273	21	252	116	136
Final and Special Examinations . .	246	—	246	119	127

The Ashpitel Prize was awarded to William John Roberts, M.A., who passed the Final Examination in November 1909.

The Council desire to thank the Board of Examiners for the continuance of their invaluable services.

The Statutory Examinations qualifying for Candidature as District Surveyor in London, and for Candidature as Building Surveyor under Local Authorities, were held in London in October, and certificates of competency to act as District Surveyors in London were granted to Messrs. Baxter Greig and John Halton Markham, and a certificate of competency to act as Building Surveyor under Local Authorities to Reginald Guy Kirkby.

Prizes and Studentships.

The Deed of Award of the various Prizes and Studentships was presented to the Institute at a General Meeting on the 17th January 1910. At the Presentation of Prizes on the 31st January 1910 an Address to Students was delivered by the President, and a criticism of the work submitted was read by Mr. Mervyn Macartney [*F.*]. An exhibition of the drawings was held from the 18th to the 29th of January in the Gallery of the Alpine Club, and was visited by 1,100 persons. A selection of the Prize Drawings is now being sent the round of the Allied Societies.

Annual Dinner.

On the 26th May last the Annual Dinner of the Institute took place at the Whitehall Rooms, the company numbering 175 persons. The Institute was honoured on this occasion by the presence of Sir L. Alma-Tadema, O.M., R.A., Sir M. Beachcroft, Chairman L.C.C., Mr. Thomas Brock, R.A., Mr. Frank Dicksee, R.A., Sir Henry Howorth, K.C.I.E., Mr. W. H. Lever, M.P., Sir James Linton, R.I., Sir Charles McLaren, P.C., M.P., Mr. Henry Morris, President R.C.S., Mr. C. H. Read, LL.D., President of the Society of Antiquaries, J. S. Sargent, R.A., The Ven. the Archdeacon of London, Mr. Hamo Thornycroft, R.A., Sir E. Waterlow, President R.W.S.

President's "At Homes."

The Council desire to record their thanks to the President for his kindness in entertaining the members at two "At Homes," which were given on the 21st June 1909, when a selection of water-colour drawings and etchings was exhibited; and on the 10th January last, when an exhibition was held of drawings of deceased architects and draughtsmen.

Town-Planning Reception.

A Reception in honour of the visit to England of members of the German Garden City Association was held by the President and Council on the 13th July 1909, and through the exertions of the Institute Town Planning Committee, who had charge of the arrangements, an interesting collection of drawings illustrating various ideas of town planning was exhibited on the occasion. An Address of Welcome was delivered by the President, and acknowledged by Herr Rehorst, Architect of the Cologne Town Council.

Town Planning.

Some of the most important work of the year has been done by the Town Planning Committee. In the Housing and Town Planning Act of 1909 an amendment was obtained which will enable the Royal Institute to make representations to the Local Government Board before the approval of town-planning schemes. Under the guidance of the Committee a number of Town Planning Committees have been formed by the Allied Societies, and these are working in co-operation in the study of the problems of town planning, and in bringing architectural influence to bear upon the municipal authorities, who will be charged with the important task of preparing town-planning schemes. Acting on the advice of the Committee the Council have decided to organise a Town Planning Conference, which will be held in the rooms of the Royal Institute between the 11th and 16th July. His Majesty the King has graciously granted his Patronage to the Conference, and the Executive Committees are arranging a programme of Papers by authorities on the subject, and an Exhibition of Town Plans, Photographs, and other interesting material.

During the course of the year a series of Papers on Town Planning has appeared in the JOURNAL.

Sessional Papers.

Since the issue of the last Annual Report the following Sessional Papers have been read before the Institute :—

17th May 1909 : " Smoke Abatement," by Sir Wm. Richmond, K.C.B., R.A. [*H.A.*].
15th Nov. : " The Planning and Laying-out of Public Places," by H. Inigo Triggs [*A.*].
13th Dec. : " Architectural Education in America," by Professor A. D. F. Hamlin.
17th Jan. 1910 : " Carr of York," by S. D. Kitson, M.A. Cantab. [*F.*].
14th Feb. : " George Frederick Bodley," by Edward Warren, F.S.A. [*F.*].
14th Mar. : " The Business Side of Architecture," by A. A. Hudson, Barrister-at-Law [*H.A.*].
4th April : " Architecture of the Balkan States," by George Hubbard, F.S.A. [*F.*].
18th April : " The Architecture of Adventure," by Professor W. R. Lethaby [*F.*].

The final Paper of the Session will be read on the 23rd May by Mr. E. A. Rickards [*F.*]. Subject : " Art of the Monument."

New By-laws.

The most important event of the year has been the approval of the new By-laws by the Privy Council. These By-laws were the result of long consideration, first by the By-laws Revision Committee, and then by the Council, and they were discussed and amended at numerous Meetings of the General Body during the year. They were finally approved by the Privy Council on the 23rd March 1910, and it then became possible to receive applications for the new class of Licentiates. Steps have been taken to lay the advantages of this class before all practising architects and assistants throughout the Empire, and the response already made is very gratifying.

The new Charter has also made provision for the appointment of a Board of Architectural Education with extended powers, and this will begin its important work immediately.

Parliamentary Bill.

In accordance with a Resolution passed at the General Meeting of the 4th March 1907, the Parliamentary Bill Committee have been at work upon the draft Bill defined in that Resolution, and when it has been approved by the Council it will be laid before the General Body for their consideration.

New Premises.

During the course of the year the Council obtained the approval of the General Body to a proposal to purchase the lease held by Messrs. Knight, Frank & Rutley, at 9 and 11 Conduit Street. In the terms of this purchase the Conduit Street Galleries, with their entrance in Maddox Street, and several offices and other accommodation, will be taken over by the Royal Institute on the 24th June. This will improve the Library accommodation and enable the Institute to hold its exhibitions, examinations, and receptions under its own roof in future. Improvements in the arrangement and decoration of the new premises will be made.

Aberdare: Fever Hospital.
Aberdeen: Elementary School.
Acton: School.
Ballater: Hospital.
Ballsbridge: Park lay-out.
Bloxwich: Public Elementary School.
Blyth: Secondary School.
Bothwell: Schools.
Brae Head: Academy.
Buralem: Public Buildings.
Cardiff: National Museum.
Coventry: Municipal Buildings.
Cradley Heath: Sunday School.
East Molesey: Isolation Hospital.
Edenderry: Municipal Offices.
Eltham: Parish Hall.
Endcliffe Park: Church.
Harpenden: Public Hall.
Herne Bay: Pier Pavilion.
Huddersfield: Church.
Karachi, India: Municipal Offices.
Kendal: Technical School.
King's Norton: Elementary School.
Larne: Technical School.
Leeds: Business Premises.
Minehead: Shelter.
Newburn: Council Offices.
New Cross, S.E.: Branch Library.
Oldham: Town Hall Extension.
Otley: Grammar School.
Peterborough (The Soke): Secondary School for Girls.
Preston: Grammar School.
Renfrew: New Offices.
St. Albans: Library.
Scarborough: Café and Promenade.
Stoke: Council School Enlargement.
Stoke-on-Trent: Town Hall.
Tralee: Carnegie Library and Technical School.
Wakefield: Elementary School.
Walsoken: School.
Warrington: Elementary School.
Whitby: Secondary Schools.
Whitley Bay: Elementary School.
Wood Green: Public Baths.
Workington: Technical and Secondary School.

THE BOARD OF ARCHITECTURAL EDUCATION.

Pending the appointment of the new Board under the revised Charter and By-laws, the Board of Architectural Education has practically suspended operations.

Periodical visits have been made by the visitors appointed by the Board to the various Schools of Architecture, whose curriculum is in accordance with that suggested by the Board.

REPORT OF THE ART STANDING COMMITTEE.

Five meetings of the Art Committee have been held since the submission of the last Report.

Mr. John W. Simpson was again elected Chairman, and Mr. Henry T. Hare, Vice-Chairman. Mr. J. S. Gibson, after seven years' excellent work, tendered his resignation as Senior Honorary Secretary; the thanks of the Institute are due for his valuable assistance in the work of the Committee. Mr. E. Guy Dawber, who fills the vacancy, and Mr. W. A. Forsyth were appointed Hon. Secretaries.

Among other matters which received the consideration of the Committee are the following:—

At the suggestion of the Committee renewed representations were made by the Council to the *Wellington Memorial* Completion Committee with a view to learning their intentions with regard to this important work and ascertaining under whose advice they are acting. As no satisfactory reply was received, a letter was addressed to *The Times* by the President, but nothing was elicited beyond an intimation that it "was not apprehended that there would be any difficulty in strengthening the monument so that while not altering its appearance in any way it would carry the statue."

Attention having been drawn by *The Times* to the deplorable state of the grave of *Alfred Stevens* in Highgate Cemetery, the Art Committee requested their Hon. Secretaries to ascertain its actual condition with a view to arousing the interest of the Royal Institute if necessary. It was found that the simple Portland stone tomb had fallen into disrepair; that it was partly buried by the raising of the surrounding ground by adjacent interments of later date, and that the brass inscription plate had been partly wrenched off and twisted by thieves, whose nefarious intentions were frustrated. After some correspondence, the work of restoration was undertaken by the Blandford Town Council, which, to its honour, is erecting a memorial to Stevens in his native town of Blandford.

Representations were made by the Council, at the instance of the Art Committee, to His Majesty's First Commissioner of Works with regard to the *widening of Piccadilly* at the corner of Air Street. It was pointed out that it was most desirable that the design of the Piccadilly Hotel

should be carried on rather than the reproduction of the existing façade which the Committee understood to be contemplated. We have the satisfaction to report that the Commissioner is in full accord with the Committee on this point.

The assistance of the Committee was sought in an effort to induce the Dean and Chapter of Winchester Cathedral to present the remains of the *Inigo Jones Chancel Screen*, formerly in the Cathedral, to the Victoria and Albert Museum. Drawings were prepared and much correspondence ensued. The Dean personally explained that the fragmentary condition of the stones rendered the gift unsuitable to South Kensington, but that on the suggestion of Mr. Jackson, the architect for the Cathedral works, the remains were to be placed in the new Archæological Museum at Cambridge.

The proposal of the City Corporation to build the new *St. Paul's Bridge* has received the attention of the Committee. The Council were recommended to urge the Corporation to receive a deputation of architects and other artists, with a view to securing the best possible design for so important an undertaking. The Corporation assenting, a deputation duly attended a meeting of the Bridge House Committee and was favourably received. The subsequent action of the Corporation is somewhat obscure and further representations by the Institute may be desirable with a view to safeguarding the architectural character of the work.

Another project of the Corporation, the re-erection of the three-story wing on the east side of the courtyard entrance at the *Guildhall*, was brought before the Committee. This main entrance was originally built by George Dance, but in later years, in order to disclose the main wall and roof of the Great Hall, its eastern wing was pulled down. The Corporation is now undertaking the uncovering and restoration of the beautiful Crypt below the Great Hall. The work is of exceptional interest and is being admirably carried out by Mr. Sydney Perks, F.S.A. [*F.*], the City Surveyor. The Kitchens are being removed from the Crypt and space has to be found for them in the three-story wing, now being replaced at the main entrance. The recommendations were conveyed to the authorities through the offices of the President.

The proposal to cover the famous *Roman Bath* at Bath with a glass roof was discussed at some length. As the matter was still in its early stages, the Council of the Institute has communicated with the Corporation of Bath and urged them to consult a competent adviser in a work of such importance.

The Farming Woods Estate, in Northamptonshire, having been recently sold to a Company for developing the land, the Art Committee has approached its owners and expressed the hope that the famous *Lyveden New Building*, built by Sir Thomas Tresham, should be preserved without alteration.

Consideration has been given to the threatened extension and alteration of the interesting *Church at Puddletown*, in Dorset. The work is intended as a Memorial. In addition to photographs kindly placed at the disposal of the Committee by the editor of *Country Life*, much detailed information, together with the working drawings of the scheme, were courteously sent by the architect, Mr. C. E. Ponting, F.S.A. After fully discussing the various points of view involved, the Committee concluded that the circumstances did not justify interference with the existing state of the fabric, and recommended the Council to make public protest against the proposal.

The promotion of a Bill in Parliament which seeks powers to erect a Mission Hall upon the site of the disused burial ground of *St. James's Church, Piccadilly*, was duly considered. In view of the threatened removal of trees and general disturbance of the amenities of this interesting Renaissance Church, the Committee strongly recommended the Council to oppose the passing of the measure. The London County Council has lodged a formal protest against the proposal.*

* In consequence of the opposition aroused by the proposal, the Bill has been rejected by the House of Commons.

Architectural Copyright. Thanks to the services rendered to the Institute by its Representatives, Mr. John Belcher, R.A., and Mr. John W. Simpson, great progress has been made towards obtaining the protection of copyright for works of architecture. It is hoped that in the near future this right will be secured by means of legislation.

Professional Conduct. During the course of the year the Council have been compelled to take action in several cases of professional advertisement and breach of professional etiquette.

Board of Defence. Many architects have applied for and received advice on questions of principle and practice, and in view of several cases of liability for dry rot the Council have issued two circulars on the subject.

St. Paul's Bridge. The Council appointed the President, Sir Aston Webb, Sir L. Alma-Tadema, Sir George Frampton, Mr. T. E. Collcutt, Mr. H. T. Hare, Mr. John W. Simpson, and Mr. H. V. Lanchester as a deputation to the Bridge House Estates Committee of the Corporation to urge upon them the architectural aspects of this important undertaking.

L.C.C. (General Powers) Bill, 1909. The Building Act Amendment Clauses of this Bill were the subject of consideration by the Council, who appointed Mr. Edwin T. Hall, Vice-President, Mr. J. S. Gibson, Vice-President, Mr. John Slater [*F.*] and Mr. Wm. Dunn [*F.*] to attend conferences upon the Bill called by the L.C.C., at which representatives of many other Institutions and Societies affected by the Bill were also present. At these conferences the action of the R.I.B.A. was supported by almost all the other Societies. Failing agreement on the matters in dispute, the Bill was opposed by the Royal Institute, in conjunction with the Institution of Civil Engineers, the Surveyors' Institution, and other bodies, before a Committee of the House of Commons, and later on important amendments in the interests of building owners were obtained as a result of the opposition.

Finance. The Council have pleasure in reporting the continued financial prosperity of the Institute. Although the balance of income over expenditure is only £595 10*s.* 9*d.*, as against £1,841 14*s.* 4*d.* last year, this is mainly accounted for by exceptional expenditure incurred in connection with the new By-laws and the opposition to the L.C.C. (General Powers) Bill. The sum of £1,066 has been invested during the year, and in addition to this a sum of £1,000 has already been paid to Messrs. Knight, Frank & Rutley on account of the purchase of their leases. The invested capital is now over £27,000. The statement of income and expenditure, and the balance sheet for the year ending 31st December 1909, prepared by Messrs. Saffery, Son & Skinner, chartered accountants, and audited by Messrs. John Hudson and C. E. Hutchinson, the hon. auditors appointed last year, together with the estimate of income and expenditure for the current year, are appended to this Report (pp. 530–32).

Appointments. Since the issue of the last Annual Report the Council have appointed the following gentlemen to serve as the Institute Representatives in connection with the various bodies indicated :—

British School at Rome	Mr. John W. Simpson.
Conference on Taxation of Land Values	Mr. George Hubbard. Mr. Edwin L. Lutyens. Mr. Ernest Newton.
Departmental Committee on the Cost of School Buildings	Mr. J. Osborne Smith. Mr. H. W. Burrows. Mr. W. G. Wilson.
Engineering Standards Committee	Mr. Edwin T. Hall.
Garden Cities and Town Planning Association Conference	Mr. Walter Cave. Mr. H. V. Lanchester. Mr. Paul Waterhouse.

General Council for the National Registration of Plumbers .	Mr. H. D. Searles-Wood.
International Congress of School Hygiene, Paris, 1910 . .	Mr. Edwin T. Hall. Mr. J. Osborne Smith.
London Council for the National Registration of Plumbers .	Mr. H. D. Searles-Wood.
National Housing and Town Planning Council Conference .	Mr. H. V. Lanchester. Mr. John W. Simpson. Mr. Raymond Unwin. Prof. Beresford Pite. Sir Aston Webb.
Royal Institute of Public Health Congress, Liverpool, 1910 .	Mr. T. E. Eccles.
Royal Sanitary Institute Congress, Brighton, 1910 . . .	Mr. Edwin T. Hall. Mr. Max Clarke.
Sanitary Inspectors' Examination Board	Mr. H. D. Searles-Wood.
University of Sheffield Court of Governors	Mr. J. Alfred Gotch.
University of Bristol Court of Governors	Mr. Mowbray A. Green.

Grants. Since the issue of the last Annual Report the Council have made the following grants :—

Architects' Benevolent Society, £100.
Architectural Association Sketch Book, £25.
Architectural Association, £100.
Artistic Copyright Society, £26 5*s*.
British School at Rome, £21.
Concrete Aggregates Commission, £25.
Royal Architectural Museum, £21.
Sheffield Society, £12 10*s*.

Competitions. The Competitions Committee have had under their consideration all the conditions issued by various promoters, and in cases where the conditions have been unsatisfactory, letters urging modifications have been sent to the promoters. In the case of the Competitions for the Warrington Elementary School, the Workington Technical School, and the Acton School, the Committee's efforts to obtain satisfactory amendment of the Conditions having been unavailing, the Council by publication in the JOURNAL and in the professional Press have advised members of the Institute not to take part in them. The following have been the President's appointments to Assessorships during the official year :—

Aberdare	Fever Hospital	Sir William Emerson.
Birkdale	Design for Building in Glazed Brickwork .	Mr. Max Clarke.
Bloxwich	School	Mr. Edmund Wimperis.
Blyth	Secondary School	Mr. J. Alfred Gotch.
Cardiff	National Museum of Wales	Mr. Edwin T. Hall, to act with Sir Aston Webb and Mr. J. J. Burnet.
Chislehurst . . .	Cemetery	Mr. Ernest Newton.
Herne Bay . . .	Pier Pavilion	Mr. Edwin T. Hall.
Johannesburg . . .	Municipal Buildings	Mr. Leonard Stokes.
Kentish Town . . .	Mission Hall	Mr. Andrew N. Prentice.
Liverpool	Arts Building	Mr. E. Guy Dawber.
London	Medical Examination Hall	Mr. Thomas E. Collcutt.
London	Peabody Buildings	Mr. Paul Waterhouse.
Peterborough . . .	Girls' Secondary School	Professor F. M. Simpson.
St. Anne's-on-Sea . .	Golf Club House	Mr. Ernest Newton.
Stockport	Library	Mr. Percy S. Worthington.
Watford	Grammar School	Mr. Ernest Newton.
Wigan	Elementary School	Mr. John W. Simpson.
Wimbledon . . .	Hospital	Mr. William A. Pite.

Copies of the "Regulations" have been sent to the promoters of the following competitions, together with letters requesting that a copy of the Conditions be sent for the Institute Library :—

REPORT OF THE LITERATURE STANDING COMMITTEE.

Since the election of the present Committee in June 1909 the Literature Committee have held eight meetings.

At the first meeting Mr. R. Phené Spiers was elected Chairman; Mr. J. D. Crace, Vice-Chairman; Messrs. C. Harrison Townsend and W. Henry Ward, Hon. Secretaries.

The new catalogue for the Loan Library, which was in the press when the Committee last reported, has since been issued.

The Sub-Committee appointed to consider the question of the elimination of superfluous books have made recommendations which have been adopted by the Committee and submitted to the Council. In view, however, of the acquisition of the new premises, the Council have deferred consideration of this matter.

The Committee have also had under consideration the annual grant placed at their disposal by the Council. Compared with the expenditure of three cognate institutions, it has been found on inquiry that the sum expended by the Institute on the purchase of books and binding is very considerably below that of the three societies in question, viz. the Institution of Civil Engineers, the Surveyors' Institution, and the Royal Geographical Society. Although the Council have not yet seen their way definitely to increase the annual grant, the Committee hope to be able to make further recommendations.

In view of the fact that the important essay by Professor R. Willis *On the Construction of the Vaults of the Middle Ages*, published in the Institute TRANSACTIONS of 1842, is now out of print, the Committee having considered estimates of the cost of its republication, have recommended the Council to republish the essay on the basis of approved estimates, so that it may be offered for sale at 2*s*. 6*d*. The Committee's recommendation has been adopted by the Council.

The Librarian reports to the Committee as follows:—

During the twelve months ending the 31st March of the present year 283 volumes and 41 pamphlets have been added to the Library of the Royal Institute, exclusive of periodicals, reports, and Transactions of Societies, and parts of works issued in serial form.

The number of works presented was 150 volumes and 41 pamphlets.

The works purchased comprised 133 volumes, of which 56 were added to the Loan Library.

The attendance of readers in the Reference Library numbered 5,420.

The number of books issued on loan was 4,026.

The number of books issued through the post was 288.

The number of tickets issued for admission to the Library, other than to members of the Institute or to Students and Probationers, was 84.

Donations of books or pamphlets have been received from Sir John Wolfe Barry, Mr. John Bilson, Mr. F. Bligh Bond, Mr. C. R. Baker King, Monsieur C. Buls, Monsieur F. de Dartein, Monsieur H. Daumet, Mr. James Ransome, Signor G. T. Rivoira, Count R. de Lasteyrie, Mr. F. H. Mansford, Mr. Benj. Ingelow, Mr. R. Phené Spiers, Herr H. Storck, Mr. S. Ravenstein, the Executors of the late Mr. W. M. Fawcett, Mr. W. Wonnacott, Mr. W. R. Davidge, from the Ecclesiastical Commissioners for England and the Commercial Club of Chicago.

Mr. Halsey Ricardo has presented a number of important works to the Loan Collection, including Stuart and Revett's *Antiquities of Athens*, Taylor and Cresy's *Architectural Antiquities of Rome*, the Society of Dilettanti's *Unedited Antiquities of Attica* and *Antiquities of Ionia*, Palladio's *Architecture*, &c.

Mr. C. E. Sayer has presented a valuable collection of water-colour drawings, chiefly of buildings and decorative work at Pompeii, by Alexander Roos.

The President of the Conseil Municipal de Paris has presented a complete set of the plans of the city of Paris showing the results of the most recent municipal survey as carried out by the Service du Plan de Paris (1905-07).

Mr. T. M. Rickman has presented a complete set of the *Architectural Association Sketch Book*, comprising thirty-six bound volumes.

Various works, both English and foreign, on town planning and cognate subjects have been added to the Library during the year.

The Lodge Quatuor Coronati has presented a number of volumes to complete the Institute's set of the Lodge's Transactions.

Amongst the books presented or acquired during the year the following may be mentioned: Romea's *Historia de la arquitectura cristiana española en la edad media*; Hoffman's *Baukunst und dekorative Skulptur der Renaissance in Deutschland*; Ward's *French châteaux and gardens in the Sixteenth Century, a series of reproductions of hitherto unpublished drawings by Jacques Androuet du Cerceau*; Lefèvre-Pontalis' *L'Architecture religieuse dans l'ancien diocèse de Soissons*; Simpson's *History of Architectural Development, vol.* 2; Dartein's *Études sur les ponts en pierre, vols.* 3 *and* 4; Burger's *Die Villen des Andrea Palladio*; Hulot & Fougères' *Sélinonte, la ville, l'acropole et les temples*; Le Nail's *Lyon: architecture et décoration aux XVII*ième *et XVIII*ième *siècles*; Storck's *Roskilde Domkirke*; Rivoira's *Lombardic Architecture*; Lethaby's *Greek Buildings represented by Fragments in the British Museum*; Brière's *Le Château de Versailles*; Contet's *Documents de ferronnerie ancienne*; Fouquier's *Les grands châteaux de France*; Fenger's *Le temple étrusco-latin de l'Italie Centrale*; Jantzen's *Das niederländische Architekturbild*; Lasteyrie's *L'Église de Saint-Philibert-de-Grandlieu*; Statham's *Organ and its Position in Musical Art*; Choisy's *Vitruve*; Millet's *Monuments byzantins de Mistra*, etc.

LIBRARY STATISTICS 1909-10.

Date	Day Attendances.			Evening Attendances.			Books issued on Loan.
	Members.	Non-members.	Total.	Members.	Non-members.	Total.	
1909.							
April	118	222	340	48	98	146	336
May	115	231	346	47	109	56	386
June	118	224	342	42	95	137	392
July	124	169	293	24	53	77	268
August	Reference Library closed.			Reference Library closed.			43
September	129	182	311	39	62	101	376
October	135	212	347	60	136	196	394
November	142	230	372	54	135	189	495
December	132	172	304	65	94	159	281
1910.							
January	126	261	387	54	115	169	387
February	117	195	312	62	126	188	323
March	122	199	321	78	149	227	345
Total	1378	2297	3675	573	1172	1745	4026

REPORT OF THE PRACTICE STANDING COMMITTEE.

Nine meetings have been held since the date of the last Annual Report.

At the commencement of the Session the following officers were elected:—W. H. Atkin-Berry, Chairman; W. Henry White, Vice-Chairman; Herbert A. Satchell and H. J. Pearson, Hon. Secretaries.

Special recognition was made of the services of Mr. Edward J. Greenop, who had acted as Hon. Secretary to the Committee for the past six years.

The question as to how the presentation of the views of Standing Committees before the

Council could more effectually be secured was considered, and it was suggested that the Chairman of each Standing Committee might for that purpose become an *ex-officio* member of the Council. This has, however, been represented as impracticable.

The subject of advertisement by commercial firms that they are prepared to supply to the public professional advice in connection with work entrusted to them, and the holding by members of the Institute of positions as professional advisers to such firms, was dealt with, and a recommendation was made to the Council to the effect that a statement on the subject might usefully be issued to the public.

An inquiry having been received from America as to how the R.I.B.A. Conditions of Contract were found to work in practice, with the view to the adoption by American architects of a similar document, a carefully considered reply was prepared and forwarded to the Council.

The resolution of the General Body asking the Council to appoint a Special Committee to consider the advisability of a revision of the existing Schedule of Charges, and to take steps to obtain the opinion of all members of the Institute on the subject, was referred by the Council to this Committee for consideration and report. A circular form of inquiry has accordingly been prepared and issued to the membership generally, and replies are now being received.

A considerable number of questions have been received relating to difficulties encountered in practice in regard to the interpretation of various clauses in the Conditions of Contract and the Schedule of Professional Charges, on the matter of professional advertising, and on architects' liability for dry-rot in buildings. These have been carefully considered and replied to. Most of them being of a confidential nature cannot be more particularly referred to. Arising out of them, however, there were two matters of general interest, each of which was referred by the Council on the recommendation of the Committee to the legal advisers of the Institute for their opinion. The first of these was the legal definition of *force majeure* in Clause 25 of the Conditions of Contract, the reply to which has been published in the JOURNAL. The second dealt with the protection afforded in the present state of the law by the wording of Clause 20 of the Conditions of Contract dealing with workmen's compensation claims. In view of the opinion expressed on the clause as it now stands, the Council has decided to amend it and thus bring it up to date.

Several communications have reached the Committee from clients and solicitors asking advice on various questions relating to the professional procedure of architects employed by them, but in all such cases the Committee have declined to deal with such questions without previous communication from the architects concerned.

REPORT OF THE SCIENCE STANDING COMMITTEE.

The Science Standing Committee have held nine meetings, with an average attendance of ten, since the last report was published.

The following officers were elected at the commencement of the Session:—Mr. Max Clarke, Chairman; Mr. H. D. Searles-Wood, Vice-Chairman; Messrs. Matt. Garbutt and Alan E. Munby, Hon. Secretaries.

The question of the "Supporting Power of Rocks and Soils" was discussed, and it was felt that the many items of information upon the subject which must be in the hands of individual members of the Institute would, if brought together and carefully collated, be of much value to the general body. A letter asking members to assist was accordingly inserted in the JOURNAL of the 28th August 1909, but up to the present it has unfortunately not produced the desired result.

Dr. Strahan, of the Geological Museum, is about to make certain comparative "Tests of Building Stones," with a view to extending our knowledge of their behaviour when exposed to the atmospheric conditions of London. The Committee have advised as to various details of the proposed tests as well as upon the particular stones which may be usefully dealt with.

In connection with these tests, a suggestion has been made that it would be useful to have at the Institute a collection of "Micro-photographs of Building Stones," and a recommendation has been made to the Council upon the subject.

The Sub-Committee upon "Paint Standards" has submitted an interim report. The terms of the reference included directions to make an initial search in current literature with a view to ascertaining what has already been done in the matter of standardisation. This investigation has involved the preparation of extracts from a large number of volumes, and the matter collected, though containing facts of great value, proves to be mostly of too technical a character to be translated directly into simple practical terms suitable for use by the profession, and it would appear that but small effort has been made, at least in this country, to deal with the question of standardisation at all, though practical men with whom the Sub-Committee came into contact confirmed the opinion that some standards are desirable. It will further be evident that in the absence of any standards any precise specification is impossible. The Secretary of the American Institute of Architects has been interrogated as to the attitude of the profession towards this question in the United States, but, as yet, no reply has been received. The investigation so far undertaken has, however, impressed the Sub-Committee with the following facts:—(1) That adulteration in paint materials is very common, although it can be shown, generally speaking, that the best materials are the most economical when renewal is considered; (2) that legal definitions are very difficult of formation, and are often based too much upon mere chemical composition without regard to other properties; (3) that the physical condition, particularly that of the size of the particles of solid ingredients, is of very great importance, and that could this be standardised it would form one valuable basis for specification. The durability of paint, given a suitable vehicle, appears to depend, as in the case of concretes, to a very large degree upon the use of scientifically graded aggregates. The absence of any standard of fineness of grinding, moreover, renders it impossible to mix paints to definite tints by using given weights of constituents, which is a great hindrance to the practical man. A short monograph, suitable for the lay reader, embodying a description of the chief characteristics of paint materials, is in course of preparation by the Committee, and it is hoped to present it shortly.

It will be remembered that, the durability of the preservative coatings commonly used upon cast-iron drain pipes having been questioned, Mr. E. C. Hannen very kindly offered to lay down some lengths of pipe by various makers and to take them up again for inspection after a few years' service. Accordingly, early in December 1905 certain "coated cast-iron drain pipes" were laid at No. 10 Stanhope Street, Hyde Park. There were six lengths, of which five were coated with solution and one was uncoated, and the whole were laid as part of a house drain and were used in the ordinary way until the end of August 1909. They were then after 3¾ years' use taken up and examined, and it was found that, while the coatings were not quite perfect, the deterioration had been very slight, quite insufficient, in fact, to enable any definite estimate to be made as to the length of time during which they would have remained serviceable. The uncoated length also remained practically as good as when put into the ground. It may be added that the pipes were laid in the usual way between two manholes, a few inches below the stone paving of an area, and were surrounded by sandy gravel and jointed with blue lead. The Committee wish to put on record an acknowledgment of their indebtedness to Mr. E. C. Hannen for his help in this matter.

The Committee examined and corrected some proofs, put before them by the Council of the Institute, of Mr. Alfred Schlomann's *Illustrated Technical Dictionaries*.

The experiments of the "Mortar Sub-Committee" are still progressing, and the final tests will probably be made in January 1911. It will, of course, take some time after that date to arrange the results, complete the tables and diagrams, &c.

REPORT OF THE RECORDS COMMITTEE.

Professor W. R. Lethaby was elected Chairman, and Mr. Curtis Green, Hon. Secretary.

The Committee have to report that the work of preparing a list of buildings suitable for architectural study is progressing. Schedules have been issued during the year to various societies and persons who agreed to co-operate in the work of compiling the list, and numerous forms of schedule have been received.

Acting on an extended reference from the Council, the Committee have submitted to the Council a series of suggestions with a view of directing and systematising the work undertaken by Institute Students and Prizemen. Under the heading of "General Advice to Architectural Students" the Committee's suggestions were largely adopted and included in the Prizes and Studentships pamphlet of 1909–10. A further recommendation has been made in agreement with the Prizes and Studentships Committee with regard to the travelling studentships, viz.—"That the greater part of the student's time should be devoted to the study of some architectural work or group of works of high architectural interest." The Committee have also recommended that "in order that the student's studies may be more real and interesting, and to make their valuable labours generally available and useful, the best work should be published, the publication to be effected either through the Institute JOURNAL, the *A.A. Sketch Book*, or through and by arrangement with the professional journals, and that the more important examples be published officially by the Institute as special monographs." Acting on this recommendation the Council contributed 25*l.* towards the expenses of the *A.A. Sketch Book* on the understanding that a special number should be devoted to the publication of the studentship drawings—a condition which was fulfilled by the *Sketch Book* in the issue of their first quarterly part of the present year.

The Committee have now further considered this point, and they feel that it would be a great incentive to students, while holding the scholarships of the Institute, to make adequate drawings of fine examples of architecture if the R.I.B.A. announced that it would be prepared from time to time to publish independently such studies as were of sufficient merit.

The Committee do not suppose that such exceptional publications need be made more frequently than once in three or four years, and it might be expected that the sale would at least largely meet the cost of production.

The Committee desire by this means to encourage special research work and accurate record, not only for the sake of the record, but also and primarily for the value of the training to the student. At the same time the Committee think the work so published would interest in such critical studies and be of considerable value to architects generally. The studies should include attempts at "Conjectural Restoration" somewhat after the manner of those done by French students.

As an example of the advantages of following out the study of one group of facts, the Committee would point to the remarkable essay on "The Construction of the Vaults of the Middle Ages," by the late Professor Willis, published in the TRANSACTIONS for 1842.

The Committee have also made recommendations with regard to the Essay Prize, and in

consultation with a sub-Committee of the Prizes and Studentships Committee, the following recommendation was adopted: "That subjects for the Essay Prize should as far as possible be chosen to induce competitors to make definite contributions to knowledge; also that the Examiners may recommend selected essays for publication, and that others might be read at Sessional meetings." The Committee, after further consideration, have made the following recommendations as follows:—

1. That it is desirable to make the experiment of allowing students to select their own subjects, while a specimen list of subjects [the Committee submitted 15 such subjects] might be printed so as to assist the students to a clear view of what is wanted.

2. Competitors are expected to make a contribution to knowledge, by accurate research and clear presentment of facts, so that their essays may be accepted as authoritative statements on the several subjects dealt with. Photographs, as well as drawings, to be allowed as illustrations, and a bibliography should be added.

REPORT OF THE AUDITORS FOR 1909.

We have audited the accounts for the year 1909, checked the statement of securities with the Bank list and deeds produced, and are pleased to report that we found them correct and the finances of the Institute in a very satisfactory state.

The invested capital now amounts to £27,076, showing an increase of £1,066 over the previous year, there is also an increase in the dividends amounting to about £59.

The general printing account exceeds that of the previous year by about £188, and is due to the extra printing required in connection with the new charter, by-laws, and additional general meetings.

Chiefly for the same reason and on account of larger issues, the expenditure in connection with the JOURNAL exceeds that of the previous year by about £300.

We are sorry to find a decrease of about £402 in the total of the fees received in connection with the examinations, but although the fees for the "Preliminary" and "Intermediate" are considerably less, it is satisfactory to find that the fees for the "Final" examinations are more.

The balance on the Income and Expenditure Account of Ordinary Funds is considerably less than that of last year, and is chiefly due to the large expenditure incurred in connection with the London County Council's General Powers Bill, new catalogue for loan library, and special reporting for the meetings in connection with the new by-laws.

We desire to call attention to the unfortunate decrease (twenty-five) in the number of Fellows, and to the fact that only thirteen have been elected during the year. It is hoped that many Associates who are eligible will be induced to seek election during the coming Session. At the same time we are pleased to see an increase in the number of Associates, 119 having been elected during the year.

We are pleased to say that the audit was facilitated owing to the very careful and accurate manner in which the accounts were kept.

JOHN HUDSON [*F.*]
C. E. HUTCHINSON [*A.*] } *Hon. Auditors.*

FINANCES.

The accounts of Ordinary and Trust Funds for 1909, audited by Messrs. John Hudson [*F.*] and C. E. Hutchinson [*A.*], *Hon. Auditors*, here follow:—

Income and Expenditure Account of Ordinary Funds for the Year ended 31st December 1909.

Dr. Exclusive of Entrance Fees, Final Examination Fees, and Subscriptions in advance. **Cr.**

EXPENDITURE.

	£	s.	d.	£	s.	d.
TO ORDINARY EXPENDITURE—						
Rent	925	0	0			
Gas and Electric Lighting	115	7	0			
Coals	17	3	9			
				1057	10	9
Salaries				2137	15	5
General Printing, Stationery, Stamps, and Petty Expenses				1060	12	7
General Meetings and Exhibitions				331	7	6
Housekeeping				272	9	3
Advertisements				86	1	11
Examination Expenses				437	2	8
General Repairs				95	8	2
Fire Insurance				34	18	9
Medals and other Prizes				180	13	6
Grant to Architects' Benevolent Society	125	0	0			
Grant to Library	218	6	6			
Grant to Royal Architectural Museum	21	0	0			
Grant to Architectural Association	100	0	0			
Grant to British School at Rome	21	0	0			
Grant to Architectural Association Sketch Book	25	0	0			
Grant to Concrete Aggregates Commission	25	0	0			
				535	6	6
THE JOURNAL—						
Reporting	59	16	0			
Printing and Binding	1266	7	0			
Illustrations	206	9	8			
Addressing, Postage, and Carriage	376	12	1			
				1908	15	9
THE KALENDAR—						
Printing	219	4	4			
Postage and Carriage	32	14	1			
				251	18	5
Contributions to Allied Societies				438	7	6
MISCELLANEOUS EXPENSES—						
Legal and Accountants' Charges	222	4	6			
Presidents of Allied Societies	65	10	1			
Telephone, &c.	25	11	0			
Sundries	77	13	10			
				391	8	5
SPECIAL DISBURSEMENTS—						
L.C.C. (General Powers) Bill 1909	522	1	1			
Loan Library Catalogue	51	15	6			
Special Reporting (By-laws)	31	4	0			
				605	2	7
Dinner (deficit)				79	19	0
Balance of Income over Expenditure				595	10	9
				£10510	0	3

INCOME.

	£	s.	d.	£	s.	d.
BY ORDINARY INCOME—						
Subscriptions—						
856 Fellows at £4. 4s.	3596	4	0			
Ditto, Arrears	84	0	0			
1252 Associates at £2. 2s.	2679	4	0			
Ditto, Arrears	143	7	0			
40 Hon. Associates at £2. 2s.	84	0	0			
Ditto, Arrears	19	19	0			
				6555	14	0
Dividends on Stocks and Shares—						
Newfoundland Stock	66	4	2			
Architectural Union Co.	185	10	0			
Consols	69	13	8			
Tasmanian Government Stock	62	15	8			
Dominion of Canada Stock	78	17	2			
Queensland Government Stock	46	12	8			
London and North Western Railway Stock	33	0	6			
Bank Stock	9	3	4			
Madras Railway Stock	28	19	6			
Great Northern Railway Stock	31	13	3			
Great Western Railway Stock	35	8	3			
Cape of Good Hope Stock	50	10	10			
West Australian Stock	68	2	0			
New South Wales Stock	33	2	11			
London County Council Stock	32	9	9			
Interest on Deposit	9	11	2			
				851	14	11
JOURNAL and KALENDAR—						
Advertisements	1000	0	0			
Sales	135	16	3			
Sales of other Publications	508	9	1			
				1644	5	4
Examination Fees—						
Statutory	25	4	0			
Preliminary	516	14	0			
Intermediate	532	7	0			
Special and Final (forfeited)	282	1	0			
				1358	6	0
Use of Rooms—						
District Surveyors' Association	25	0	0			
R.I.B.A. Tenants	75	0	0			
				100	0	0
				£10510	0	3

SAFFERY, SONS & SKINNER,
Chartered Accountants.

Examined with the vouchers and found to be correct. 21*st March* 1910. (Signed) JOHN HUDSON [*F.*], C. E. HUTCHINSON [*A.*].

Balance Sheet of Ordinary Funds, 31st December 1909.

Dr. **Cr.**

LIABILITIES.

	£	s.	d.	£	s.	d.
To Sundry Creditors				340	19	2
To Bank Overdraft				233	12	11
To Examination Fees anticipatory of election				281	3	0
To Subscriptions received in advance				165	18	0
To Building Fund				1267	8	1
To Charitable Fund				969	14	7
To Travelling Fund				1385	4	0
To *Accumulated Fund*—						
Surplus of liquid assets over Liabilities as per last Balance Sheet	23065	16	2			
Add Entrance Fees in 1909:						
F. £27 6 0						
A. 374 17 0						
	402	2	0			
Arrears for 1909 (as per contra)	298	4	0			
	23764	3	2			
Less Arrears for 1908, since received or cancelled £291 8 0						
Furniture and Fittings bought 20 4 0						
	311	12	9			
	23442	10	5			
Add Balance of Income over Expenditure for 1909	595	10	9			
				24038	1	2
				£28802	0	11

ASSETS.

	£	s.	d.	£	s.	d.
By *Investments at cost*—						
Architectural Union Co., 265 Shares	3671	1	0			
Consols 2½ per Cent. £2942. 11s. 10*d.*	2975	14	0			
Tasmanian Government 3½ per Cent. Stock £1836. 8s. 3*d.*	2030	0	0			
Dominion of Canada 3 per Cent. Registered Stock £3324. 8s. 8*d.*	3219	11	0			
Queensland Government 3 per Cent. Stock £1643. 9s. 1*d.*	1580	0	0			
London and North Western Railway 4 per Cent. Consolidated Preference Stock £871	1049	5	8			
Bank Stock £101. 18s.	230	18	0			
Madras Railway "B" Annuity £40 11s. 3*d.*	1385	4	0			
Great Northern Railway 4 per Cent. Consolidated Perpetual Preference Stock £835	930	12	0			
Great Western Railway 5 per Cent. Consolidated Preference Stock £747	1199	16	10			
Cape of Good Hope 3½ per Cent. Stock £1526. 13s. 4*d.*	1500	0	0			
West Australian 4 per Cent. Stock £1800	1972	13	0			
New South Wales 3½ per Cent. Government Stock £1001. 4s. 1*d.*	1000	0	0			
London County Council 3 per Cent. Stock £1147. 14s. 4*d.*	1000	0	0			
Newfoundland 3½ per Cent. Stock £2000	2005	1	0			
By *Building Fund*—						
Indian Government 3½ per Cent. Stock £1180. 5s. 11*d.*	1267	8	1			
				27076	6	7
By Debtors (Rent, Advertisements, &c.)				185	8	4
By Subscriptions in Arrear 1908	63	7	0			
Ditto 1909	298	4	0			
				361	11	0
By *New Premises*—						
Payment on Account of Premium on Lease and Valuers' and other Charges				1178	15	0
				£28802	0	11

SAFFERY, SONS & SKINNER,
Chartered Accountants.

Examined with the vouchers and found to be correct. 21*st March* 1910. (Signed) JOHN HUDSON [*F.*], C. E. HUTCHINSON [*A.*].

Revenue Accounts of Trust Funds for the Year ended 31st December 1909.

Dr.

	£	s.	d.
Ashpitel Prize Fund :—			
To Cost of Ashpitel Prize [Mr. J. C. Proctor] [*A.*]	10	0	0
To Balance carried forward	48	2	6
	58	2	6
Anderson and Webb Fund :—			
To Travelling Expenses	10	10	0
To Balance carried forward	132	5	0
	142	15	0
Arthur Cates Legacy :—			
To Amount paid Priseman [L. Wilkinson] [*A.*]	42	0	0
To Balance carried forward	66	10	2
	108	10	2
Donaldson Testimonial Fund :—			
To Cost of Medals	1	7	6
To Balance carried forward	10	8	9
	11	16	3
Godwin Bursary :—			
To Grant to Mr. A. H. Verstage [*A.*]	35	0	0
To Grant to Mr. J. A. Allan	30	0	0
To Balance carried forward	21	10	2
	86	10	2
Grissell Legacy :—			
To Cost of Medal	9	18	0
To Balance carried forward	3	13	9
	13	11	9
Library Fund :—			
To Purchase of Books, Binding, &c.	209	5	3
To Petty Expenses	4	19	8
To Balance carried forward	23	1	7
	237	6	6
Owen Jones Studentship :—			
To Amounts paid to Students, viz. :—	£	s.	d.
Mr. S. H. Maw	21	0	0
Mr. A. R. H. Jackson	50	0	0
	71	0	0
To Balance carried forward	99	7	0
	170	7	0
Pugin Memorial Fund :—			
To Amount paid to Student, viz. :—			
Mr. S. G. Follett	40	0	0
To Cost of Medal	1	9	6
To Balance carried forward	7	19	10
	49	9	4
Saxon Snell Bequest :—			
To Cash paid Mr. Milburn [*A.*]	30	0	0
To Balance carried forward	94	7	5
	124	7	5
Tite Legacy Fund :—			
To Cash paid Mr. G. S. Nicol [*A.*]	10	0	0
To Cash paid Mr. G. Drysdale	10	0	0
To Balance carried forward	7	1	10
	27	1	10
Wimperis Bequest :—			
To Grant to Mr. G. S. Nicol [*A.*]	10	0	0
To Balance carried forward	100	16	7
	110	16	7

Cr.

	£	s.	d.
By Balance from last Account	44	2	6
By Dividends on 20 Shares, Architectural Union Co., at 14*s.* per Share	14	0	0
	58	2	6
By Balance from last Account	112	13	0
By Dividends on 43 Shares, Architectural Union Co., at 14*s.* per Share	30	2	0
	142	15	0
By Balance from last Account	64	10	5
By Dividends on £1160 4 per Cent. N.-E. Railway Preference Stock	43	19	9
	108	10	2
By Balance from last Account	9	3	9
By Dividends on £72 L. & N.-W. Railway 4 per Cent. Consolidated Preference Stock	2	12	6
	11	16	3
By Balance from last Account	47	11	6
By Dividends on £1030 Caledonian Railway 4 per Cent. Stock	38	18	8
	86	10	2
By Balance from last Account	0	0	10
By Dividends on £20, 0*s.* 8*d.* "B" Annuity Great Indian Peninsula Railway	13	10	11
	13	11	9
By Balance from last Account	15	10	6
By Annual Donation from Mr. Sydney Smirke [*F.*]	5	0	0
By Annual Grant from Ordinary Funds	212	2	9
By Entrance Fee	2	2	0
By Fines, &c. (Loan Library)	2	12	0
	237	6	6
By Balance from last Account	60	16	6
By Dividends on £2128 Midland Railway 2½ per Cent. Stock	50	8	7
By Dividends on £1247 Great Western Railway 5 per Cent. Consolidated Stock	58	1	11
	170	7	0
By Balance from last Account	8	15	10
By Dividends on £1070 L. & N.-W. Railway 4 per Cent. Consolidated Preference Stock	40	13	6
	49	9	4
By Balance from last Account	101	5	2
By Dividends on £698, 4*s.* New Zealand 3½ per Cent. Stock	23	2	3
	124	7	5
By Dividends on £1150 2½ per Cent. Consols	27	1	10
	27	1	10
By Balance from last Account	81	14	7
By Dividends on £1024, 18*s.* 8*d.* Metropolitan Water Board 3 per Cent. Stock	29	2	0
	110	16	7

Sawyery, Sons, & Skinner,
Chartered Accountants.

Examined with the vouchers and found to be correct. 21*st March* 1910. (Signed) { John Hudson [*F.*].
C. E. Hutchinson [*A.*].

Dr. *Balance Sheet of Trust Funds, 31st December 1909.* Cr.

	£	s.	d.
To Ashpitel Prize Fund:—			
Capital—20 Shares in the Architectural Union Company, Limited, at £14 per Share	280	0	0
Balance at credit of Revenue Account	48	2	6
To Anderson and Webb Fund (Board of Architectural Education):—			
Capital—42 Shares in the Architectural Union Company, Limited, at £14 per share	602	0	0
Balance at credit of Revenue Account	132	5	0
To Arthur Cates Legacy Fund:—			
Capital—£1160 N.-E. Ry. 4 per Cent. Preference Stock	1504	5	0
Balance at credit of Revenue Account	66	10	2
To Donaldson Testimonial Fund:—			
Capital—£72 L. & N.-W. Railway 4 per Cent. Consolidated Preference Stock	89	0	0
Balance at credit of Revenue Account	10	8	9
To Godwin Bursary Fund:—			
Capital—£1030 Caledonian Railway 4 per Cent. Debenture Stock	1344	13	6
Balance at credit of Revenue Account	21	10	2
To Grissell Legacy Fund:—			
Capital—£20. 0s. 8d. "B" Annuity Great Indian Peninsula Railway	813	14	10
Balance at credit of Revenue Account	2	13	9
To Library Fund:—			
Balance at credit of Revenue Account	23	1	7
To Owen Jones Studentship Fund:—			
Capital—£2128 Midland Railway 2½ per Cent. Debenture Stock £1773 0 0			
£1247 Great Western Railway 5 per Cent. Consolidated Guaranteed Stock 2114 12 9			
	3887	12	9
Balance at credit of Revenue Account	99	7	0
To Pugin Memorial Fund:—			
Capital—£1070 L. & N.-W. Railway 4 per Cent. Consolidated Preference Stock	1342	12	6
Balance at credit of Revenue Account	7	19	10
To Saxon Snell Bequest:—			
Capital—£698. 4s. New Zealand 3½ per Cent. Stock	700	0	0
Balance at credit of Revenue Account	94	7	5
To Tite Legacy Fund:—			
Capital—£1150 2½ per Cent. Consols	1109	1	6
Balance at credit of Revenue Account	7	1	10
To Wimperis Bequest:—			
Capital—£1024. 18s. 8d. Metropolitan Water Board 3 per Cent. "B" Stock	1000	0	0
Balance at credit of Revenue Account	100	16	7
	£12988	5	2

Saffery, Sons, & Skinner,
Chartered Accountants.

	£	s.	d.
By Government and other Securities for total book value of Trust Funds invested	12373	0	7
By Cash in hands of Bankers	615	4	7
	£12988	5	2

Examined with the vouchers and found to be correct. 21*st March* 1910. (Signed) { John Hudson [*F.*], C. E. Hutchisson [*A.*].

The Council submit an Estimate of Income and Expenditure of Ordinary Funds for the year ending 31st December 1910, exclusive of Entrance and Final Examination Fees:—

Estimate of Income and Expenditure for Year ending 31st December 1910.

EXPENDITURE.	£	s.	d.
Rent	1335	0	0
Lighting and Warming	180	0	0
Salaries	2220	0	0
General Printing, Stationery, Postages, and Petty Expenses	1065	0	0
General Meetings, Exhibitions, &c.	220	0	0
Housekeeping	275	0	0
Advertisements	185	0	0
Examination Expenses	400	0	0
General Repairs	100	0	0
Fire Insurance	70	0	0
Medals and other Prizes	225	0	0
Grant to Library	150	0	0
Other Grants	350	0	0
Journal	1900	0	0
Kalendar	250	0	0
Contributions to Allied Societies	500	0	0
Miscellaneous—			
By-laws Revision and Privy Council Fees 50 0 0			
Legal and Accountants' Charges 200 0 0			
Contingencies 200 0 0			
	450	0	0
Estimated Balance of Income over Expenditure	655	0	0
	£10740	0	0

INCOME.	£	s.	d.
Subscriptions and Arrears	6900	0	0
Dividends on Stocks and Shares and Interest on Deposit Account	725	0	0
Sale of Publications (other than Journal and Kalendar)	500	0	0
Journal and Kalendar—			
Sales 140 0 0			
Advertisements 1000 0 0			
	1140	0	0
Use of Rooms	125	0	0
Examination Fees	1350	0	0
	£10740	0	0

The above Estimate includes certain items for additional Expenditure and Income due to the acquisition of the new Premises and the new class of Licentiates.

[*For discussion on the Annual Report, see pp.* 541 *sqq.*

TOWN PLANNING.

PAPERS COLLECTED BY THE R.I.B.A. TOWN PLANNING COMMITTEE.

XVII. THE IMPROVEMENT OF THE CITY OF SYDNEY AND ITS SUBURBS.

By A. R. Jemmett [*F.*].

The Royal Commission appointed in May 1908 to consider the improvement of the city of Sydney and its suburbs, and to inquire fully into the whole subject of the remodelling of the city, with reference both to the present requirements of the city and suburban population and to the increase of population and traffic within the next twenty-five years, has presented a voluminous report. The Commission held ninety meetings, examined forty witnesses, and obtained direct from the authorities of the leading cities of Europe and America much information illustrating various aspects of municipal activity. After submitting an interim report in December 1908, recommending the immediate acquisition of the property of the Australia Gaslight Company, it issued its final report in June 1909. This report is divided into seven parts. 1. Introductory. 2. Traffic considerations. 3. Beautification of the city. 4. Slum areas and housing reform. 5. Future growth of the city. 6. Particulars of improvement schemes considered by the Committee. 7. Conclusion.

In the introduction to the final report we are told that the Commissioners' "aim has been to ascertain how at a reasonable expenditure the transit facilities of Sydney and its suburbs may be improved, while at the same time adding character and dignity to a city in harmony with its situation on one of the finest harbour sites in the world." They believe that their scheme will satisfy the needs of the traffic for the next twenty-five years, add to public comfort and convenience, and contribute to the amenities of the city.

Part II, which deals with traffic considerations, points out that Sydney, as the main distributing centre for the State, handles 90 per cent. of the total imports, as well as a large proportion of the exports of New South Wales. The goods having to be carted between wharf and warehouse or warehouse and rail create a heavy traffic on roads with steep gradients, already too narrow, and still further encumbered by tram lines. The result is that the traffic conditions are unsatisfactory and dangerous.

The Commissioners consider that if the port of Sydney is to be maintained and developed on modern lines better means of communication between the wharves and the higher levels of the city will have to be provided.

All the witnesses agreed in attributing the congestion of many of the streets to the tramways, which, in the absence of any local or suburban railway, have developed into what is really a system of street railways. These tramways being already insufficient for present-day requirements, it is proposed to introduce a system of underground electric railways for city and suburban passenger traffic, leaving the tramways to their proper function of feeding the railway system.

A series of recommendations for the widening and regrading of streets to deal with vehicular traffic are embodied in the accompanying plan, and attention is drawn to the necessity of dealing with the main highways to the suburbs and country beyond before any further increase in values takes place.

Part III, dealing with the beautification of the city, points out that the attractiveness of a city is an aid to its prosperity—as witness the experience of Paris and other European cities—and that there is much scope for improvement in this direction. The Commission considers that a comprehensive Building Act is an immediate necessity to secure unity of purpose and harmony of design in the architecture of the city by regulating height, style, and character of the buildings, street awnings, &c.

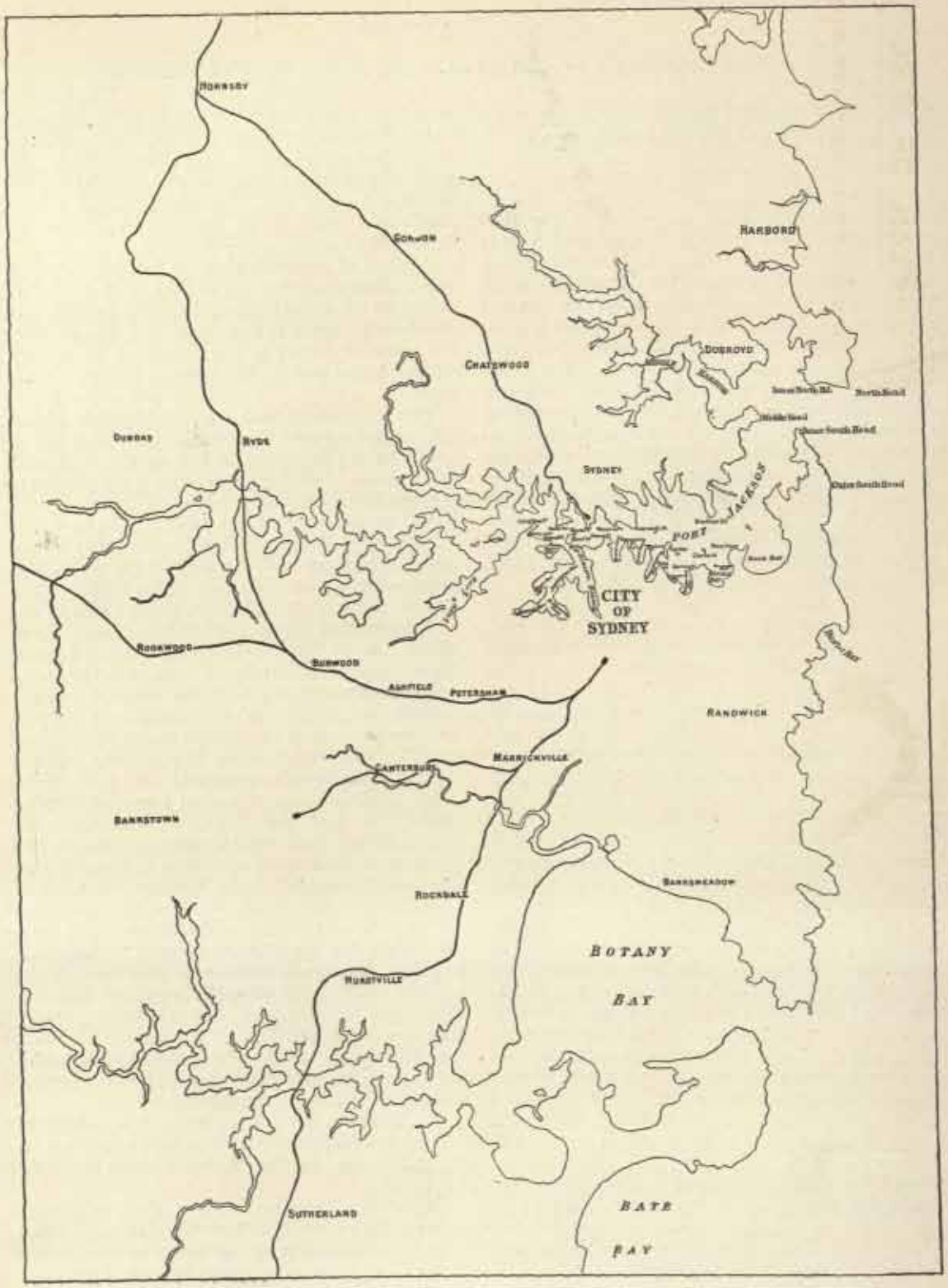
The grouping together of public buildings in the official quarter, the remodelling of Queen's Square, the removal of Darlinghurst gaol, and the treatment of the approaches to the Central Railway Station, are examples of the suggestions towards the improvement of the general aspect of the city, to which end the provision of fountains and the cultivation of trees is advocated.

In Part IV, dealing with slum areas and housing reform, we find that here, as elsewhere, the destruction of slum areas in the city districts has led to the creation of new ones in the suburbs. The Commissioners doubt whether the cities in Great Britain have really struck at the root of the evil by providing municipal dwellings within their boundaries for the working classes. They seem to think that the Germans are dealing with the problem in a more scientific way, and that the acquisition of municipal land is a better remedy than municipal building. They also consider that the disadvantages of the tenement system outweigh the advantages, particularly in a city with a climate like Sydney; so they recommend:—

(1) Local authorities to have full powers to resume and remodel slum areas, and to prevent by regulation the growth of fresh slums in their districts.

(2) Local authorities to have power to acquire land for the provision of sites for workmen's dwellings; and to provide by regulation for the erection of such dwellings on approved hygienic lines.

(3) That workmen be encouraged to reside in



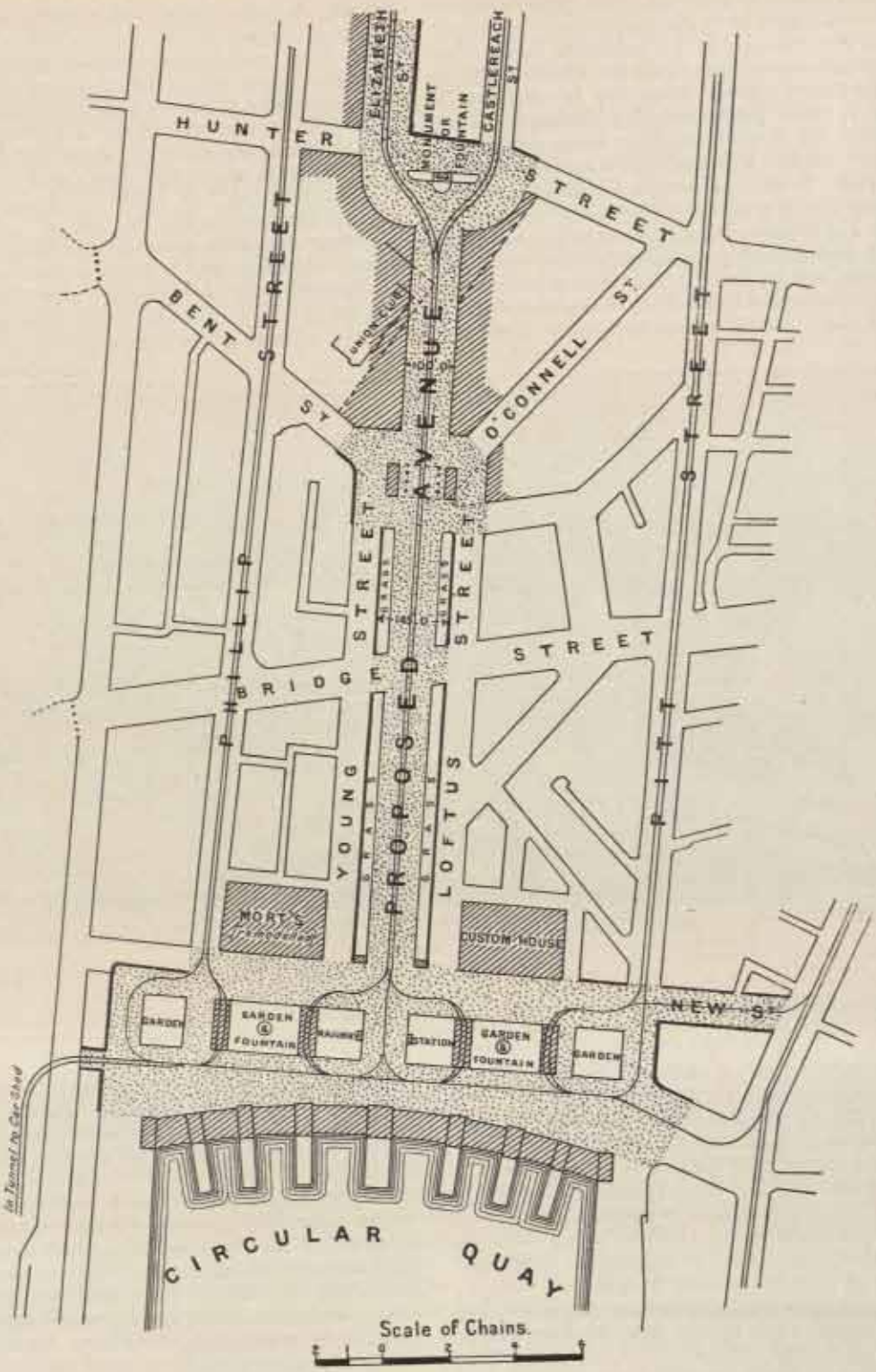
MAP SHOWING THE CITY OF SYDNEY AND ITS SUBURBS.

PLAN OF THE CITY

SHEWING CITY RAILWAY, NEW STREETS AND GENERAL IMPROVEMENTS RECOMMENDED BY THE ROYAL COMMISSION.

STREETS TO BE REGRADED, SHEWN THUS

DAWES PT
MILLERS PT
TUNNEL
PEACOCKS PT
SYDNEY COVE
FORT MACQUARIE
TUNNEL
Mrs MACQUARIE'S CHAIR
GOVERNMENT HOUSE GROUNDS
FARM COVE
BOTANICAL GARDENS
WOOLLOOMOOLOO BAY
POTTS PT
DARLING HARBOR
PYRMONT BAY
RECLAMATION
TOWN HALL STN
ST JAMES'
DOMAIN
PARK
LIVERPOOL ST'S
DARLINGHURST GAOL TO BE REMOVED
VICTORIA BARRACKS



PLAN ILLUSTRATING MR. JOHN SULMAN'S PROPOSED CENTRAL AVENUE AND REMODELLING OF CIRCULAR QUAY.

separate houses in suburban areas, in preference to tenement buildings in the city.

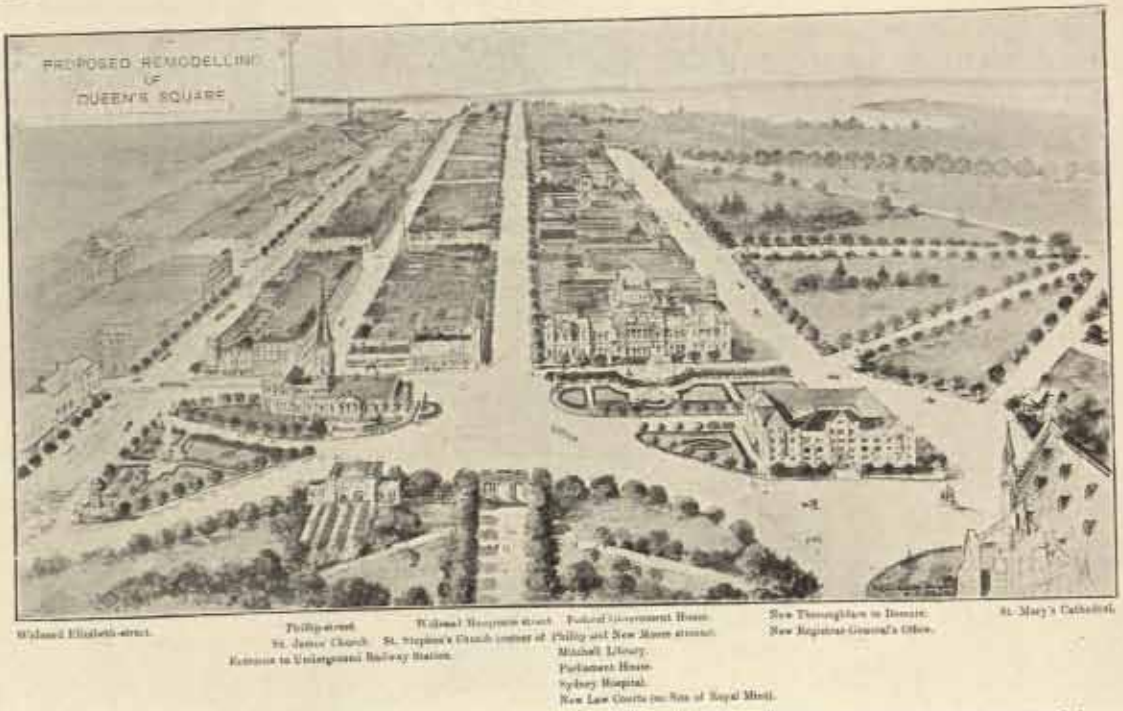
(4) Playgrounds to be provided for children wherever possible throughout the city and suburbs.

The future growth of the city is considered in Part V, which points out that although the city presents few opportunities for town planning on modern lines no such limitations apply to the outer suburbs. In order to insure a comprehensive treatment of future extensions they should be under the control of the governing authorities, and as Sydney has a comparatively dense population—although the most populous city in Australia actually covering a smaller area than either Melbourne, Brisbane or Adelaide—and is increasing rapidly, it will soon

heights, for the benefit and recreation of the citizens.

(5) That municipalities inadequately provided with park space secure additional public reserves before the price of land is further enhanced.

Part VI contains particulars of various improvement schemes considered by the Commission, and deals in more detail with many of the foregoing recommendations. It gives a summary of Mr. Burns' Town-Planning Bill and of a suggested Building Act, with proposals for fire prevention, smoke nuisance, and control of the streets. It recommends that in planning new suburbs the rectangular, or chessboard, system of streets should only be adopted where grades can be obtained of



Bird's-eye view of city looking north from Hyde Park, showing Elizabeth Street and Macquarie Street widened, Moore Street extended to Macquarie Street; new thoroughfare in the domain, and the remodelling of Queen's Square as recommended by the Commission.

be necessary to plan out additional suburbs. To this end the Commission recommends:—

(1) That municipalities be empowered to make and execute town-planning schemes on the lines of Mr. John Burns' Bill, subject to the approval of a Local Government or other Board.

(2) That municipalities be encouraged to utilise the powers contained in Ordinance No. 70 of the Local Government Act 1906, relating to the subdivision of land for building purposes.

(3) That municipalities be empowered to make regulations with the view of preserving the natural scenery of Sydney's environs.

(4) That wherever possible contour drives be made round the harbour foreshores and along the

not less than 1 in 20, and considers that much of the present difficulty has been caused by the adoption of this system regardless of its suitability to the situation. It is also in favour of linking up the parks by tree-planted avenues or boulevards.

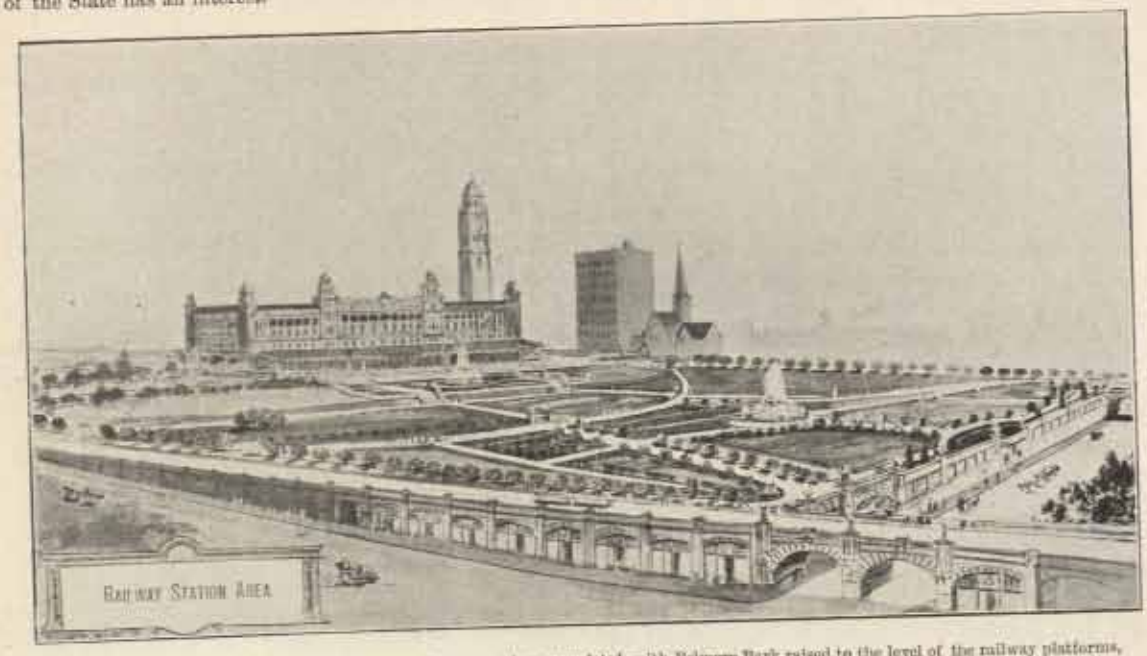
In Part VII, Conclusion, we read that "owing to the difficulties presented by the irregular configuration of the foreshores of the harbour and the hilly character of the city and suburbs, your Commissioners, as will be seen from the foregoing recommendations, have not attempted any formal plan for the remodelling of Sydney. An ideal plan of city reconstruction such as would take full advantage of the possibilities of the site could only be carried out at unreasonable and unjustifiable cost."

Following a series of paragraphs pointing out the advantages of the more important suggestions we find these recommendations :—

The adoption, wholly or in part, of a scheme of improvement of this kind involves two important questions—control and finance. While it is true that many of the suggested improvements are within the boundaries of the city proper, it can hardly be expected that the whole of the financial burden should be undertaken by the City Council. Works of a distinctly national character, like the railways, and the approaches to railway stations and wharves, should fall within the province of the Government. Others, such as the widening of existing arteries, and the opening of new ones, are for the benefit of the metropolis as a whole, and the adjoining municipalities should share the responsibility with the city. In improvements designed mainly for the beautification of the capital, every citizen of the State has an interest.

who has made a special study of, and published a pamphlet on, this question ; and Mr. J. Barlow [*F.*], who was a Member of the City Improvement and Advisory Board ; but no architect seems to have been honoured with a seat on the Commission.

The Commissioners may fairly be congratulated on having spared neither time nor trouble in the collection of evidence from all available sources, and on having put forward certain general recommendations which, as such, will meet with general approval. The advantage of a central authority armed with town-planning powers and administering an adequate Building Act, or the value of main traffic arteries to the suburbs, of linking up parks, of open spaces, fountains, and trees, will not be seriously disputed. When, however, we turn to



Sketch showing Central Railway Station as it will appear when completed, with Belmore Park raised to the level of the railway platforms, as recommended by the Royal Commission.

Seeing therefore that the interests of the State, the city and its suburbs, are so intimately associated in the scheme of improvement which we have outlined, your Commissioners are of opinion that a central authority should be appointed to initiate and carry out street improvements which extend beyond the boundaries of any one municipality, and that the State should bear its due proportion of the cost of improvements of a general character.

With the report are bound up 253 pages of evidence containing ideas, opinions, facts, and statistics of much interest and value. Accompanying it are fifty-six sheets of plans, maps, and sketches illustrating the Commissioners' recommendations, as well as some of the other proposals submitted to them.

Among the witnesses were three members of the Institute : Mr. W. L. Vernon [*F.*], Government architect of New South Wales ; Mr. J. Sulman [*F.*],

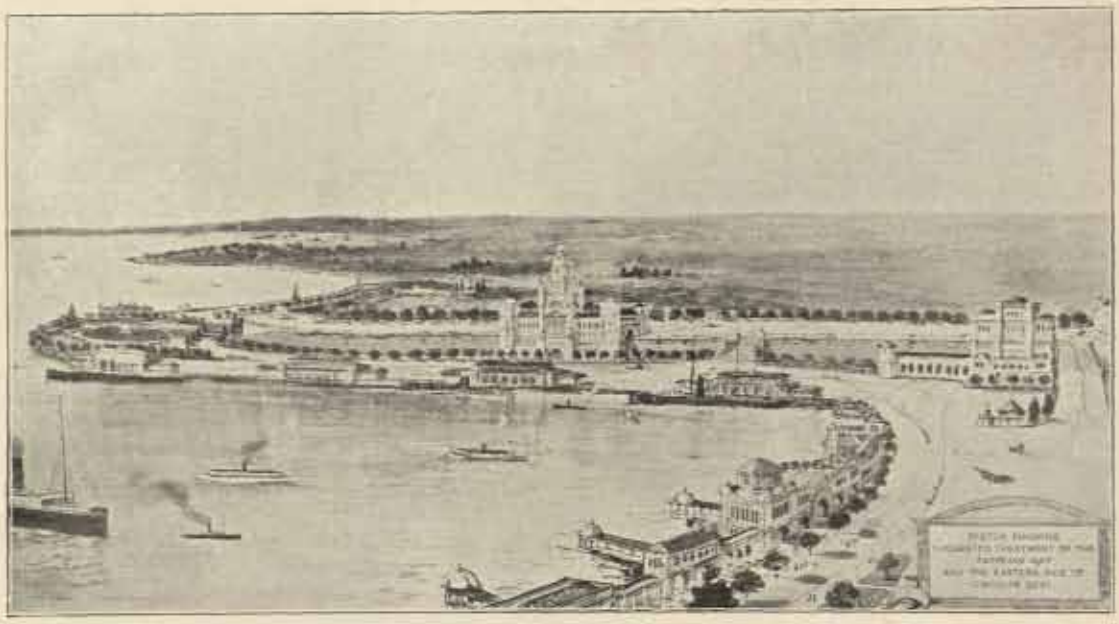
the particular scheme in which these admirable recommendations take actual shape we must confess to a feeling of disappointment, not only at the lack of any ruling idea or organic coherence in the scheme as a whole, but also at the inadequate architectural treatment of the various improvements shown, although it is possible that the way in which these latter are presented does not altogether do them justice.

There is clearly no opportunity here for the application of any arbitrary system of symmetrical formality. Governor Phillip towards the end of the eighteenth century seems to have tried, and failed, by planning main thoroughfares 200 feet wide running from Sydney Cove over the heights to Darling Harbour, regardless of the gradients. At the beginning of the nineteenth century the

city began to develop itself more naturally with seven of the ten existing streets running south from Sydney Cove, following more easily the natural formation of the ground. The principal traffic defect of the way it has ultimately developed is, as pointed out in the report—that six of these parallel streets eventually discharge their traffic into George Street on the west, and the remainder into William Street and Oxford Street on the east, these being the only outlets to the eastern and western suburbs. The new relief street parallel to Oxford Street, and the regrading of William Street, may be sufficient on the eastern side, but on the west, George Street still gathers up the accumulated traffic of most of its parallel streets before it reaches the railway station.

the treatment they propose seems hardly adequate to realise this possibility.

Being the principal water gate of the city the architectural treatment of the whole surroundings should take its cue from this fact, and suggest and emphasise the idea. The general disposition and lay-out of the streets, open spaces, and buildings should be governed by it, and nothing should be done that is contrary to it. The suggested overhead railway station across the Quay seems to be contrary to the idea of a grand entrance to an important city. It blocks up the vista and destroys all sense of entrance, and, not being the main terminal station of a great trunk line, it would occupy a position and create an effect out of all proportion to its relative importance. It may be neces-



Sketch showing the Royal Commission's suggested treatment of the Tarpeian Way and the eastern side of Circular Quay.

It is difficult however for any one with no personal acquaintance with the locality, and no more exact knowledge of the contours and differences of level than can be gathered from these maps and sketches, exactly to realise and appreciate at its proper value the actual practical utility of these various street improvements. It may be presumed that, as regards the relief of traffic, each suggestion may be a local improvement as far as it goes.

We are better able to realise the effect of such suggestions as the proposed improvement to Circular Quay at the head of Sydney Cove. The Commissioners are alive to the fact that this harbour, which is the principal water gate or entrance to the city, "has in it the makings of as splendid a water front as any to be found in the world," but

sary to put a station here—but must it be overhead and not underground?

In the scheme suggested by Mr. Sulman this station is kept underground and a vista is opened from the water to a grand central boulevard running back into the heart of the city. This leaves the entrance open and seems to express more correctly the general ruling idea.

Turning, however, from the discussion of any particular instance to the consideration of the scheme as a whole, it is true that the Commissioners, by admitting that they have made no attempt to produce an ideal scheme, do, to some extent, disarm criticism.

But although a scheme may not be ideal yet it can be complete in itself as far as it goes and show some feeling for artistic expression. If the Com-

mission has not altogether succeeded it is not for lack of suggestions. The evidence of many of the witnesses, notably that of Mr. J. D. Fitzgerald, barrister-at-law, shows some appreciation of the requirements of the situation. In the suggestions put forward by him, and by Mr. Sulman and others, there seems to be the germ of a possible idea which would express one of the principal characteristics of the city, and be in harmony with its historic growth and with the natural formation of the site.

The city develops both naturally and historically from Sydney Cove—the water gate. A broad boulevard driven straight through to the land gate —the Central Railway Station—forms the principal thoroughfare of the city, and would express by its size, general treatment, and decoration the special character of Sydney as the chief port and entrance of the State. The Central Railway Station is the centre of the city, and possibly of an inner ring, from which main avenues radiate out along the crest of each promontory and down to each bay of the harbour. The wharves in each bay are connected by a line of tunnel and viaduct forming an outer ring. The whole like a mis-shapened hand with fingers outstretched into the water, the quays between the fingers allotted to different branches of trade, and of ferry or sea-going traffic.

Some general idea of this sort, worked out in accordance with the levels and other dominating facts of the situation, might produce a result with some coherence and architectural possibility, without being necessarily in any way ideal.

But to do anything like justice to this opportunity it must be approached on a higher plane, with a wider view of considerations not merely local. The tract of country from North Harbour to Botany Bay should be treated as one comprehensive scheme, and the whole question dealt with in a different spirit, with some imaginative insight into the possibilities of the future.

To the possibilities of the future of Sydney there are no practical limits. Its geographical position commanding the South Pacific Ocean, its unrivalled harbour—the water gate of a continent containing not one tenth of its future population—the play of the world forces that make for the growth and the future prosperity of the Pacific, all point to Sydney as the future commercial centre of the Southern Hemisphere—the Queen City of the South. Its development is a matter of Imperial concern.



Sketch showing the Royal Commission's suggested treatment of area occupied by Darlinghurst Gaol, Criminal Court, Reception House, and Sacred Heart Church.

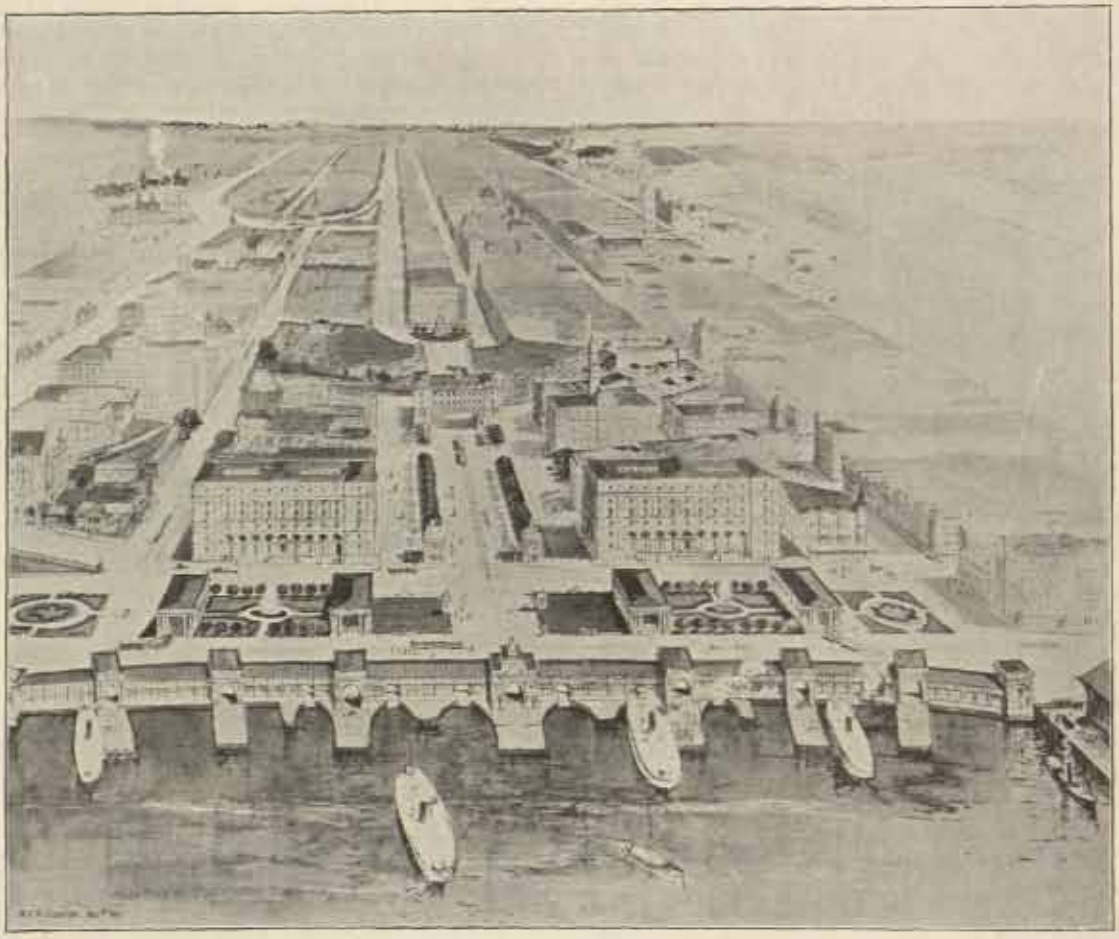
The Commissioners having declined to attempt the production of an ideal scheme because the cost, in their opinion, would be unreasonable and unjustifiable, the question naturally arises—does such an expression of opinion come within the terms of reference of the Commission? in which no special direction on this point is to be found.

Surely the question of cost is one for those who must ultimately pay. The public might pay for a good scheme what it might not pay for a bad one. A scheme that appealed to public imagination might win public approval; it all depends upon its nature. The ideal scheme is not necessarily the most expensive one.

Apart from this it must be remembered that these matters progress. The public becomes more

interested and more willing to pay as time goes on, and the next generation may regard as perfectly reasonable what the present one considers extravagant. It is in the nature of these schemes that the ultimate benefit as well as the ultimate cost both fall upon posterity, and it is here that the weakness of this scheme is most evident. It may "meet the increasing demands of traffic for many years to come," it may even to some extent "contribute greatly to the attractiveness of the city," but it is very doubtful whether it has equal value as "preparing the way for more general improvements in the future." It should be possible to produce an ideal scheme which would not unduly burden the present generation in carrying out so much as is immediately necessary, and at the same time be a better guide for future development and altogether fairer to posterity. For a comprehensive scheme must come some day; the longer it is delayed the more it will cost. The more you do wrong now, the more it will cost to put it right then—and posterity will pay. The immediate necessity is not so much to do anything actively right as to refrain from doing anything positively wrong, which will compromise the future.

One hardly knows whether to question the valour of the Commissioners in declining to attempt an ideal scheme, or to applaud their discretion. For the question of the competence of a body, so constituted, to produce any architectural scheme—ideal or otherwise—is inevitably forced upon one. The political, legal, social, and commercial considerations which govern such a scheme are rightly the province of men of affairs, but the actual expression of their conclusions and recommendations in a broad and comprehensive architectural conception is work for architectural experts of the highest distinction. It seems a pity that the information here collected and the general conclusions arrived at cannot form a basis and guide for the production of an ideal scheme more worthy of both the present and future of Sydney.



Sketch illustrating Mr. John Sulman's proposed Central Avenue and remodelling of Circular Quay.

MR. H. HEATHCOTE STATHAM.

On the retirement of Mr. Statham from the editorship of *The Builder*, which position he has held for more than a quarter of a century, the Council of the Royal Institute desire to express their appreciation of the services he has rendered to architecture and the high ideals he has kept steadily in view in his conduct of that journal.

They hope that he may long continue to devote his literary and critical ability to the maintenance of that high standard in the art of architecture which he has always had at heart.



9 Conduit Street, London, W., *7th May* 1910.

CHRONICLE.

The Royal Patronage of the Institute.

The continuity of the Royal interest in the aims of the Institute has been further assured by the gratifying intimation conveyed to the President and Council a few days ago that H.R.H. the Prince of Wales had been pleased to bestow his Patronage upon the Institute. The late Queen and her royal Consort were both Patrons of the Institute, the Prince Consort on one occasion taking the Chair at a Council Meeting, and presiding afterwards at an Ordinary General Meeting. His Majesty the King has been Patron since the year 1866.

The Annual General Meeting: Discussion of the Annual Report.

The Annual General Meeting was held Monday, 2nd May, Mr. James S. Gibson, *Vice-President*, in the Chair. The formal announcement from the Chair that H.R.H. the Prince of Wales had become Patron of the Institute was received with hearty applause. The Chairman having presented and formally moved the adoption of the Annual Report, which was issued to members with the last number of the Journal, the motion was seconded by Mr. Edwin T. Hall [*F.*], and the following discussion took place:—

Mr. William Woodward [*F.*]: Mr. Vice-President and Gentlemen, this time last year on the occasion of the presentation of the Annual Report Mr. Davidge said he thought I had some vested interest or had acquired some prescriptive right to criticise this Annual Report. Whether that be so or not, I am quite sure that the Council would be very pleased if every member would take the trouble to read, as I have taken the trouble to do, this Annual Report, because it is especially from the Annual Report that we gather the work of the Council during the year; and I must add that if the Report be framed and enlarged year by year as it has been enlarged this year, and if the Auditors make an annual report similar to that which they have made this year, my mission will be at an end, because the Council and the Auditors together are gradually taking away the ground of the remarks which I have made at the annual meetings for many years past. I find on the first page that the Council have held three more meetings than they held last session. As regards the obituary notices, I am sure we all regret to read of the loss, amongst others, of such valuable men as Cutler, Garling, Penfold, Sherrin and Worthington—all men well representative of the work of the Institute. With regard to membership, I find by comparison with the statistics of last year that we have 14 Fellows less than last year, but that we have 87 Associates more. I quite agree with the Council in recommending those Associates who are eligible to come forward for the Fellowship. Coming to the examinations, I find that the total number of candidates admitted this year was 776 as against 910 last year, and that one-fourth of those who went up for the Preliminary Examination, about one-half of those who went up for the Intermediate Examination, and about one-half of those who went up for the Final and Special Examination were relegated to their studies. That is a very large proportion, and whether it be due to a falling off in the intellectuality of the candidates or to the character and growing strictness of the questions put I do not know. I am quite aware that the questions put to the candidates are more practical and less expansive than they used to be; but I think there is still room for concentration, and still room for sparing the candidates the trouble of wandering over a large field when their energies might be confined to some more special studies. There is a reference on page 49 to town planning, and I think members will agree that the Council and members concerned have done good work in this matter. I trust the Council will advise members of the Institute to take advantage of the Town Planning Act, and to select sites that might be dealt with under that beneficent measure. The new By-Laws are also a subject of congratulation. I understand that the number of applications for the Class of Licentiates is very great, and I trust they will increase. I hope, too, now that we have ascertained that the majority of the profession are in favour of registration that we shall soon get into working order with regard to that question. On page 57 there is a very satisfactory announcement with regard to these premises. I hope we shall soon be able to take advantage of the additional area we have acquired, and that it will be found expedient to maintain the Library on the first floor where it now is, and that it will not be shifted to any other part of the premises. Coming to the finances, I find there is £1,246 less of income over expenditure this year than last. The difference is largely to be accounted for by the fact that the Institute has spent a considerable sum of money—some

£500—in opposing a Bill. The Council take to themselves the credit of doing good work, and I think they have done some very good work in that opposition. But I think that £500 was too great a sum to spend in opposing that measure. A good deal might have been saved over counsel's fees—at any rate, over £500 for opposing one Bill seems to me abnormally high. On page 51 we have the grants, and the total list seems, I may say, full of extras and omissions. For example, you gave the Architects' Benevolent Society £125 last year; you omitted £25 this year. You gave the Sheffield Society £20 last year; you have given them £12 this year. That is an omission. Then, as regards the additions, we get £26 5s. for the Artists' Copyright Society, which is quite a new thing, and £25 for the Concrete Aggregates Commission. I confess that, although I am a student of the Journal of the Institute and of the Professional Journals, I do not know what the Concrete Aggregates Commission* is, or, if I did, I do not know why we should contribute £25 to it. Perhaps some supporter of the Concrete Aggregates Commission will tell us why we should give them that money. As regards the President's appointments to Assessorships on page 52, I cannot help observing that some of the gentlemen appointed are young, and I think some of them are inexperienced; but, as this matter is entirely in the jurisdiction of the President, I will do no more than say that I think the appointment to Assessorships might be "spread"—I use the term in its fullest sense. We come now to the Art Standing Committee: there is a reference in their Report to the Wellington Memorial, and we are told of the action of the Institute in this matter. I daresay many of us read in the *Times* of 29th April last a letter from Mr. Spielmann which refers to "the addition of the unfinished discarded model of the equestrian statue," and says, "The truest memorial to Stevens is the security of his *chef d'œuvre* as he left it." I heartily concur with those words. It does not seem even now to be generally known that Stevens in his competitive model did terminate it by an equestrian figure, but when he was told by the Government of the day that the monument was to be erected in the Consistory Chapel on the south side of St. Paul's, he necessarily had to omit the equestrian figure. I remember how it is stated, I think in Longman's work, that when Dean Milman, who I think was Dean at the time, was asked for his concurrence in this memorial to the Duke to be placed in the Cathedral, he said that he had no objection to the memorial, but he had the strongest objection to seeing the Duke riding in the Cathedral on horseback over his own recumbent effigy. Therefore the monument, as we see it now, less the equestrian figure, is exactly as Stevens left it for the Consistory Chapel, and therefore it does seem—and I quite agree with Mr. Spielmann—that if this Institute could induce the Dean and Chapter to omit this figure they would certainly do well, and would not do injury to Stevens's magnificent monument. This, of course, is quite apart from the question of the stability of the monument, which this Institute has properly raised. There is a reference also to the grave of Alfred Stevens. I remember attending the funeral at Highgate Cemetery of a friend of mine, with Mr. Young, the man who cast the bronze work for the Wellington monument, and after the funeral we tried to find the grave of Alfred Stevens. After some difficulty, on getting the number from the attendant, we did find it; but I am sorry to say that its dilapidated condition was not due to subsidence, but to entire neglect. The Art Committee's report refers to "the brass inscription plate." But this should be corrected. Technically it is brass, but there is something with it; it is really a very fine example of bronze work cast by Mr. Young, who did some very fine work to the Sphinx on the Thames Embankment. Then there is a reference to the widening of Piccadilly at the corner of Air Street. I think, perhaps, the Institute will like to know that the widening of Piccadilly at this point is likely to be finished by the repetition of Mr. Norman Shaw's western wing at the eastern end of this corner—at all events it is in contemplation. I am not finding fault at all with the design of the present building of the wine merchants—but it would be a scandal if the public permitted that façade to be re-erected in place of the repetition of Norman Shaw's western wing. Then there is the following reference to the new St. Paul's Bridge: "with a view to securing the best possible design for so important an undertaking," "the Council urged the Corporation to receive a deputation of architects and other artists," "and further representations by the Institute may be desirable, with a view of safeguarding the architectural character of the work." I made a reference to this last year, and I think you, Sir, expressed the opinion that the bridge should be the subject of a competition. Whether you are of that opinion now I do not know, but I think certainly there is an opportunity there for the architect and the engineer, which may produce hidden talent such as that which has been brought forward in other competitions. I trust the Institute will do its best to secure open competition for the bridge amongst Englishmen only, for we should be very sorry indeed to have a foreigner come over here, however fine his work might be, to spend 2¼ millions of our public money. On page 54 there is a reference to the interesting church at Puddletown. I have read the whole of the correspondence that appeared in the *Times* on this subject, and I have arrived at the conclusion that this is another example of the meddlesomeness of a certain learned body not a hundred miles from the present Royal Academy. If you take the trouble to read the remarks of the Vicar, or Rector, you will find that he is reinstating the work which was there before, and, altogether, I am certain from the particulars which have been given us that the alterations and additions which are proposed are for the benefit of the church, and will be thoroughly architectural and artistic. It is another example of interference on the part of the Institute, or on the part of the Society for the Protection of Ancient Buildings, that is entirely unnecessary. I quite agree with the action taken by the Institute with regard to the prevention of any building on the ground of St. James' Church, Piccadilly. The Committee have done excellent work in doing their best to secure what has now been brought about—viz., the rejection of the Bill by the House of Commons. It would have been a monstrous thing to erect any building on that little oasis at the side of St. James' Church. At page 54 we have the report of the Literature Standing Committee, and I quite agree with the reprint of Willis' "Construction of the Vaults of the Middle Ages." It is a paper that one cannot read too often, from the benefit to be derived from the detailed information it affords of all that pertains to the subject of which it treats. Coming to the Library report I find that the readers in the Reference Library were 111 more this year than last year, there were eighteen books issued less this year than last year, and twenty-two tickets less than last year for admission to the Library of other than members. But it is a curious coincidence that the day attendances, 3,675, should be precisely the same number as last year. Of the total evening attendances there were 111 less this year than last year, and the books issued on loan were eighteen less than last year. Those of us who attend the Library, and know the value of it, must congratulate the Institute and the students on the interest and the study that this shows on the part of those who are growing up to be professional architects. Now I come to the Practice Standing Committee. I said last year that it would be a good thing

* See JOURNAL, 23rd January 1909, p. 216.—ED.

if the members of the different Committees were to read the report before it went up to the Council, and this year the members of the Practice Committee have read the report; but whether the meeting will consider that fact as of any advantage or not is a matter for this meeting. It seems to me that, although I have been a party to the report, and although I tried to enlarge it, it still possesses the merit of brevity, and does not convey very much more information than it has done in previous years. I say that in the presence of our worthy Chairman, but he appreciates as I do—in a way I did not before I became a member—the difficulty of referring to the subjects brought before us, because, if we did, we should have to do that which we say we decline to do—*i.e.* give details of these questions. I would particularly call attention to the last paragraph where we say that when clients and solicitors, as they frequently do, ask the Institute, and the Institute refers to the Practice Committee, questions relating to professional procedure, we decline to answer the questions without previous communication with the architects involved. As regards the Science Standing Committee, I am sorry to say that a member has just gone away [Mr. Alan Munby] who knows all about it. I am sorry he has gone, because, although the report of the Science Standing Committee is very full indeed, I cannot understand what the Science Committee are going to do with regard to paint. They have been at this paint business for I do not know how many years, and why they want to standardise paint, or how they are going to standardise paint, I really do not know. We had very good paint in the Georgian period, and I am not aware that there was any standardising of paint then. We have had genuine white lead, and we can get it now. We have had excellent linseed oil, and we can get it now; and if there is a member of the Science Committee who can tell us briefly, short of an essay, what this paint business means, I shall be very much obliged to him. The Report of the Science Committee appears to be principally composed of the materials with which the road to Hell is said to be paved, that is good intentions, particularly with regard to paint. In the Report of the Records Committee, on page 59, there is a reference to the Essay Prize. I hope that the students will take more interest in this Essay Prize; it must give them lessons in composition, and perhaps improve their calligraphy and orthography. The Records Committee say that it is desirable to allow students to select their own subjects, and that subjects should be chosen to induce competitors to make definite contributions to knowledge by active research and a clear presentment of facts. Some of our architects in my earlier days, such as Pennethorne, Hardwicke, Smirke, and Donaldson, and men of that sort, were masters of composition, and were known for the clear way in which they framed their reports. We architects know how important it is that we should be able at times to frame clear reports. It may, and very often does, lead a client to go on with the job at the full price of the tender when perhaps otherwise he would not do so. Then we come to the financial statement. The legal expenses I have already referred to. But with regard to the assets and our income I was thinking whether, instead of railways that I advocated last year, we could not now begin to invest our money in aeroplanes, which I believe will be the means of transit in the future. In conclusion I should like to say a word or two on the administrative body of the Institute. We all know that no institution and no concern can succeed unless the administrative body, or the officials, are up to the mark. I had the pleasure of saying with regard to our Secretary the year before last that the proof of the pudding was in the eating. I last year said that I thought the ingredients were there, and we hoped for an ultimately good pudding. I think you will agree with me that the pudding has been in the course of cooking during last year, and that we are delighted at the excellent work done by the profited experience of our Secretary. As he goes on year by year, when many of us have gone, I am sure that the Institute of the day will find that in Mr. MacAlister we have an excellent man in every way; he is courteous, kind, attentive and diligent, and I congratulate Mr. MacAlister upon the great improvement, if I may say so, which every young secretary must feel desirable in such a position as his. It is no easy matter to take up the Secretaryship of a body like the Royal Institute of British Architects, and I am sure that Mr. MacAlister has carried his work through excellently. Then another gentleman I should like to name is Mr. Herbert Tayler. He has been with us since 1875, and he was made Assistant Secretary in 1897. As Honorary Auditor of this Institute on two occasions I have had, as all our Auditors have had, a very good opportunity of judging Mr. Tayler's work; he knows exactly where to find everything; he is thoroughly efficient in all the details of the work of the Institute, and I am sure we may congratulate ourselves upon having in Mr. Tayler a very efficient Assistant-Secretary. Very similar observations apply to the Librarian, Mr. Rudolf Dircks. Those who attend the Library appreciate the courtesy with which they are served by Mr. Dircks; and not only this, but he has an intimate knowledge of the contents of the Library and where to lay his hand on any book that is wanted. To a busy man, or a busy student, this is of the utmost importance. I remember its being said of my dear old governor's father, Mr. Cates, Principal Librarian of the British Museum (and Mr. Arthur Cates no doubt inherited a good deal of the attributes of his father with regard to his memory), that when a student in want of a book would ask an attendant to find out where it was from the catalogue Mr. Cates would indicate the place in something of the following manner, "In the gallery, on the second shelf, the sixth book from the left hand corner you will find the book"; and I believe as a matter of fact he was nearly always right. He was a perfect master of the position of every book in the British Museum Library; and Mr. Dircks is gradually acquiring a similar mastery with regard to the books in the Institute Library. Then another gentleman I should like to mention is Mr. George Northover, the Editor of the JOURNAL. He has been with us since 1893, and was made Editor in 1908. It is owing to his assiduity and care that the high standard of the JOURNAL is maintained, and those of us who have been brought in contact with him know how very efficient he is in the work he has to do, and how much we owe to him for the "editing" of our at times very disjointed remarks, and for putting them into presentable publishing shape. It would be wrong to pass over the junior members of the staff, because they are coming forward and must necessarily take the place some day of those who must retire on account of age, and they are entitled to our thanks. And I ought not to omit to mention our friend here, the Institute Reporter: how he manages to make an intelligible report of our sometimes muddled, confused, and incoherent speeches I really do not know, and I feel he deserves the thanks of us all. I think, sir, you will agree with me, and the public will agree with me, that this Institute is increasing largely its sphere of usefulness and importance. There is no doubt that during the last quarter of a century the Institute has come to hold a place in the public estimation that it did not hold before. I trust it will go on in that way, and that it will not be detrimental to the interests of the Institute if I, as I hope I shall be able to do this time next year, exercise my prescriptive right to say what I have to say on the record of its past year's work.

Mr. H. HARDWICKE LANGSTON [*F.*]: I should like to call attention to the paragraph on page 50 under the head "Architectural Copyright." Is it the fact that these two

gentlemen, Mr. Belcher and Mr. Simpson, both honoured names, were appointed by the Institute to follow up this idea of architectural copyright, or was it a self-originating and self-imposed duty?

THE CHAIRMAN: They were appointed by the Council.

Mr. LANGSTON: At the last annual meeting I asked the question what the Council meant by architectural copyright, and the only recognition of the question was a notice on the Minutes that the question was not answered. It might be possible to tell the meeting this evening what the Institute is seeking to obtain under the term "architectural copyright." If it were desirable that it should be obtained, the first step to be taken, if we are to be listened to with any effect, would be to carry to its issue the question of registration of architects. As matters stand we have no legal status to be called architects to the exclusion of those who have received no architectural training. On one occasion I sent up to the Council a paper from an auctioneer and estate agent who said he was an architect and that he employed Associates of the Institute. I am speaking from memory, but I believe he said he employed Associates of the Institute in the business. I have simply had an acknowledgment from the Council that my letter has been received, but I have not heard whether they have succeeded in bringing that man down to the level he deserves to be brought. Since I asked that question last year I have looked through the proceedings of the Architectural Copyright Committee here, and I have come upon the following clause in Mr. Belcher's statement to the House of Commons Committee:—"The editor of a building journal informed me that he did not desire to reproduce drawings of large buildings, but that he obtained drawings of small houses from architects, as his paper had a large circulation amongst country builders and estate agents, who told him 'they found them useful.'" Then why object? Is it well to insist that what we have set down as good should be refused the use of by another unless he pays a fee? Is that a right way to act? Architects surely should have a mind above obtaining fees in that direction! Architectural copyright would simply breed cupidity in us. I cannot see the good of it and I hope it will be dropped. Supposing this copyright became law, are you going actually to prevent an ignorant builder from copying and using a good plan instead of a bad one? He probably does not appreciate any difference between an architect and an estate agent. The next step would be that an architect would have the right to forbid another architect to go on with his building on the ground of an alleged infringement of his copyright. It is pitiable and can only proceed from greed. The man does you no harm by copying you. Take the case of the man who first put a spire to a church (there was a time when that was first done, of course), or a dome to a building—was it conceivable that he should have been granted a copyright of that feature? Yet it is some protection of this kind that you appear to be striving after, but I hope you will not succeed. Passing to my next point, there is a sentence in the Report which says: "During the course of the year the Council have been compelled to take action in several cases of professional advertisement and breach of professional etiquette." That reads something like the head-master of a school who tells his boys when they are breaking up for their holiday that they have been behaving very badly and must not do it again. I suppose they are members of the Institute that the Council have felt it necessary to admonish and correct? Let us have some concrete case, so that those who have sinned shall not sin any more, and those who might sin unwittingly shall learn from now that such and such an act upon their part will be considered as unprofessional and be condemned by their fellows. If there is one thing we should all observe, it is how to behave well to our neighbours. I beg the Council to give us some example of what they consider constitutes a breach of professional etiquette and what is professional advertising, not, of course, mentioning any names, but giving us a concrete case in both instances, for our edification.

Mr. WOODWARD: I read to-day in the newspaper that an action was brought by an architect at Brussels against another architect for having copied the façade of a building erected by the plaintiff in one of the avenues in Brussels. He succeeded in the action, and the defendant had to pay £100 and costs.*

Mr. G. ERNEST NIELD [*F.*]: I should like to add a few words with regard to the Report, commencing with the names of those who have passed away from us since last year. I particularly refer to my old chief, Mr. Thomas Cutler. I first went to him in 1888, and a kinder and better friend, and one more ready to give assistance to other men, I have never met before or since. He was one of the most lovable of men and his readiness to render assistance was quite exceptional. Turning to the question Mr. Langston has mentioned of professional misconduct, I think it would be useful to us if expressions of this character appeared in the JOURNAL: "The Council strongly disapprove of" so-and-so. It would be sufficient for us to know, and I think members of the Institute would be glad to know, of those matters which had incurred their disapproval. There are some who err unwittingly, and it would be of great service to them. With reference to the London County Council (General Powers) Bill, I feel that it was well fought out by the Institute, and their action deserves the hearty support of all its members. With regard to spending the money and whether it could not have been done for less, that is the cry one hears on all sides now. The money was well spent, and I hope no occasion will be allowed to pass where the money of the Institute could be spent in making a Bill of this character thoroughly practicable. Passing to the Practice Committee's report, I confess I do not understand Mr. Woodward when he says that the report should be longer than it is. Some explanation might be given as to why it was not longer and why it was cut down. One would like to hear more of what has been done; it leaves a doubt in one's mind as to whether the work has been thoroughly done. I am not suggesting that it has not been thoroughly done, but there is one point I would refer to, in last year's Report, and that is the third paragraph, which says: "The subject of professional advertising which was under discussion at the date of the last Annual Report has been further considered, and a resolution thereon sent up to the Council. At the request of the Council a form of inquiry has been prepared for circulation amongst foreign correspondents as to the practice obtaining in this matter in their respective countries. The replies are not yet to hand." Now this year no mention is made of that at all, and one would be glad to know whether those replies have come to hand, and, if so, what they were. I hope this is not an instance where the report has been cut down. I confess that it seems to me that that is so.

Mr. WOODWARD: May I say that my friend has entirely misunderstood me? I did not say that the report had been cut down; on the contrary, I said that I thought it was longer than usual.

Mr. NIELD: In the last paragraph, on page 56, it says: "A considerable number of questions have been received relating to difficulties encountered in practice in regard to the interpretation of various clauses in the Conditions of Contract and the Schedule of Professional Charges, on the matter of professional advertising, and on architects' liability for dry-rot in buildings. These have been carefully considered and replied to. Most of them being of a confidential nature cannot be more particularly referred to." I

* Noted in the last number of the JOURNAL, p. 491.—ED.

feel that there is something more wanting here. I do not wish to have any exposure made of any person, but if the facts can be put before us, if the cases which have been tried referring to dry-rot and such responsibilities could be briefly reported, I think it would be an addition to the JOURNAL which would be very much appreciated.

Mr. EDWIN T. HALL [*F.*]: They have been reported, in the JOURNAL.

Mr. MATT. GARBUTT [*F.*]: Mr. Woodward has asked what the Science Committee are doing about paint. I am very sorry Mr. Munby has had to leave early, because he is Chairman of the Sub-Committee which has the matter in hand. The Institute, I may say, is very fortunate in having in Mr. Munby a man particularly fitted for such an investigation because he is, amongst other things, a chemist. There are very few of us who can claim that qualification, and without it nobody can know much about the subject of the specification of paint. I believe there is nothing secret in what is being done, although details are not put into the report; perhaps I might mention how the whole thing came up. It was suggested that great difficulties occasionally arose when contractors, working on a specification which demanded best materials, were pulled up by the architect for using something of which he disapproved. The contractors said, "It is the very best on the market," and the architect found that if he wanted to fight he had not a leg to stand upon. Until this inquiry I certainly did not know much about paint, and I do not pretend to know much more now, and if you strike out those members of the Institute who are chemists I am certain there is nobody here who knows much about paint. In the hope of improving this state of things a specification that was far more precise than usual was put before the Science Committee, and it was suggested that some such specification would be useful to put into the hands of all members of the Institute. The matter was referred to a Sub-Committee, and when it was tackled in detail it was found that with the exception possibly of the ochres and a few common colours there is scarcely one single paint on the market the name of which gives any clear idea, to an ordinary person, of its constituents. Names are applied to paints which should not be applied at all. For instance, in my ignorance I said, "I suppose if you say vermilion it means something definite?" and I was told that if there was one thing that was vague that was the thing, and it is just the same with almost every other paint. So that a right specification of paint is a matter of enormous difficulty. I cannot pretend to say much about it, because I am no chemist. But, so far as we have gone, the statement in the report, I think, is clear; it does not contain detail, but a vast lot of detail has been gone into by the Sub-Committee, and on the Sub-Committee there are at least two men besides Mr. Munby who are chemists, and I think the final result will be very useful to the Institute. I can assure Mr. Woodward, if he is not a chemist, and he thinks he knows anything about paint, that he is sadly mistaken.

Mr. W. H. ATKIN-BERRY [*F.*]: I should just like to make one remark upon the question that was raised by a previous speaker with regard to the Report of the Practice Committee. He seems to be labouring under a delusion that there has been an attempt to suppress or cut down the report.

Mr. NIELD: That is not my idea at all. My idea was that the Council thought it was too long and cut it down.

Mr. ATKIN-BERRY: With regard to the clause which says: "A considerable number of questions have been received," etc. I doubt whether it would be desirable, even if it were practicable, to give details of all those questions. Our report would be as long as the whole of this Annual Report if we attempted to go into detail on those questions, and I say that it is not desirable in every case that we should. They are stated here to be of a more or less confidential nature, and they are very numerous; we have inserted this clause as a general account of the work that occupies a great deal of our time at all meetings of the Committee.

Mr. NIELD: There again, Sir, Mr. Atkin-Berry has misunderstood me. What I said was that one example of each character should be merely stated without any reference to names, so that men might know the character of things that had been dealt with.

Mr. ATKIN-BERRY: Their character is, I think, sufficiently shown here; there are questions on various classes of professional practice and on matters of professional charges. Architects have their difficulties in these matters, and they send them up to the Secretary, and the Secretary refers them to the Practice Committee, who carefully deliberate upon them and answer them to the best of their ability. I would just like to remind the meeting how in former years we used to tremble when Mr. Woodward got up to criticise the report of the Practice Standing Committee, but it was quite a pleasure to-night to see the beams of delight with which, being now a member of that Committee, he flitted over its report.

Mr. W. A. FORSYTH [*F.*]: I should like to say a few words in praise of the criticisms Mr. Woodward has made. Mr. Woodward said a good deal in criticism of the Art Committee which I think was very useful, notably his remark with regard to the new St. Paul's Bridge. I hope the Institute will take a more energetic course respecting that matter. With regard to Stephens's Monument in Highgate Cemetery, it fell to my lot to report upon the condition of it, and I may say that the Blandford Corporation have restored it very excellently. I think it would gratify Mr. Woodward to see it. They made one mistake in turning the inscription round, so that it reads now from the south instead of from the north. And it looks to me very much like brass. But now I would like to criticise Mr. Woodward and say that he has been inconsistent in what he said about St. James' Church, Piccadilly. He deplores the action that the Art Committee have taken with regard to Puddletown Church, and he approves of what they have done with regard to St. James', Piccadilly; but he is not consistent, because at St. James', Piccadilly, a detached building was to be put up which would spoil the view of Wren's church, but which would not touch the church at all, whereas Puddletown Church is quite different. There, there is a unique little Church fitted out with Jacobean woodwork throughout. The chancel was pulled down in 1576 and rebuilt in its present condition, and what they are proposing to do now is to pull down that 1576 chancel and demolish a house in the village to get the same stone to rebuild an extended chancel, of the character of which they have no evidence; and in addition to that, to pull down the east wall of the north aisle and extend it. The whole work comes about because a new Squire wishes to raise a memorial to his brother, and to provide a household chapel in the church, which involves a rearrangement of this unique set of Jacobean fittings and the introduction in the intervals of modern fittings. As Mr. Woodward's remarks will go out to the Press, and will be taken to have some weight, I feel bound to raise some protest to what he has said, from the other side, which is really a very important one. I do not think that the clergy, or the owners, or those who have the right to touch these historic churches, should have such freedom as they now possess.

Mr. WOODWARD: I understood from the correspondence—I have not seen the church myself—that in the case of Puddletown chancel it was simply a question of restoring the chancel to the former plan, and that these Jacobean fittings can be refixed in the new chancel; therefore what they are doing now is simply to replace what was there before. With regard to the other place, the north aisle (there again I understand entirely from the correspondence), I feel that the work will be quite satisfactory under the guidance of the architect, who I think knows exactly what he is about.

Mr. Matt. Garbutt: The facts being as stated by Mr. Forsyth, I feel sure that the Art Committee will receive the almost unanimous support of the Institute.

Mr. C. E. Hutchinson [*A.*]: There is one little item which, as one of the honorary auditors, I should like to put before this meeting, and that is that Mr. Woodward rather cavilled at the heavy legal expenses of last year. Personally, when I went through this bill I had rather a shock, and I thought it was very large; but thinking over it afterwards it appeared to me that it was good policy in every instance for the Institute to go into those matters which will affect us professionally. I would wish to take this opportunity of reminding members who do not know it, that we have a Professional Defence Committee, and I would also suggest that in future the Council should give more power still and place more money at the disposal of that professional Defence Committee and make it more widely known. If they will only follow the methods adopted by another Institution, I think they will get practically every member of the Institute to submit ticklish points to that Committee for advice, especially if afterwards they publish the results of their advice. I am convinced that on matters legal we are always spending money well.

Mr. Hampden W. Pratt [*F.*]: I am glad that Mr. Woodward referred to the excellent way in which the Journal is edited; if he had not done so, I had intended myself to remark on that point. I have had in my time a good deal of experience with regard to editorial work and correcting proofs, and I must say that the Editor of the Journal is remarkably accurate and exceedingly careful; so much so, that I think it would be extremely difficult to find the slightest mistake if you were to go through all the Journal for the whole year, and that is decidedly to the credit of our esteemed Editor. While speaking of the Journal I should also like to remark what must be in the minds of every member, probably, of the Institute, that the Journal seems to improve every year. This current volume I have perhaps had more leisure to read through than those of past years, but I have been struck with the extraordinary interest to be found from fortnight to fortnight in the Journal. One really looks forward to finding in every issue something fresh and readable and thoroughly well edited.

The Chairman: One of the advantages of discussing this Annual Report is that members have the opportunity of giving us their advice, so that in future the report may be more satisfactory, more valuable, and more useful to them. With regard to its component parts, I may assure Mr. Nield that the reports of the various committees are submitted in the Report in identically the same form in which they are presented to the Council—they are subject to no editing, no expansion, and no curtailing. The honorary Secretaries of the various committees are responsible for the reports, and I think you will agree that they all do their work remarkably well. I feel sure that any hints thrown out this evening as to fuller information, either in these reports or otherwise, will be given effect to in future. With regard to specific instances of matters of professional etiquette, I think some benefit would accrue to the Institute if these were published from time to time, because there is no doubt that in a membership as large as ours, difficulties do arise in practice; there are many questions requiring to be solved, and it is only by the help of our fellow architects that we can surmount these difficulties and solve these questions. If these are published from time to time it will make our Journal more valuable, and our individual practice perhaps a little more easy. I may tell Mr. Langston that the Council does not wish to black-list any member, or to deal harshly with anyone who may happen, either wittingly or unwittingly, to transgress what the Council consider to be proper professional etiquette. No man is condemned without being thoroughly and fairly heard. Personally I do not think that any good would result from publishing specific instances of doubtful practice. We have simply to deal with them in the best way we can amongst a crowd of over 2,000 men, all carrying on practices of widely differing character.

Mr. Langston: I only meant that men might be prevented from incurring censure.

The Chairman: I quite appreciate that. Mr. Atkin-Berry very happily said that the tone of Mr. Woodward's criticisms since he became a member of the Practice Committee has considerably changed. We are all, however, deeply indebted to Mr. Woodward for coming here year after year and criticising our Report in such a friendly and genial way. I am perfectly certain that the Report has benefited from his criticism year by year. The only thing I would remark is this, the annual elections are coming on, and although I am happy to say that Mr. Woodward is standing as a member of the Council, I am rather afraid that if he gets elected we shall lose that annual criticism of his and the Report perhaps will deteriorate to its old bad ways.

Mr. Langston: You have not answered my question about architectural copyright.

The Chairman: I am afraid I cannot go into the ethics of that question at all. The only thing I can do is to refer you to the very full statements of the Institute representatives which are published in the Journal. You will get there all the information that it is possible to give.

Mr. Langston: I merely want in a sentence of about twenty words a definition of architectural copyright.

The Chairman: This is not the first time that an attempt has been made to seduce me into a twenty-words definition on questions as difficult as that of architectural copyright, and I think I will not succumb to-night.

Mr. Nield: One question that I put has not been answered, the reference to the report of last year and the answers received from foreign correspondents.

The Secretary: Those replies are coming in steadily, but very slowly. We may soon be able to do something with those that have come in.

The motion for the adoption of the Report was then put and carried unanimously.

The Chairman: It is now my very pleasant duty to ask the meeting to give a hearty vote of thanks to the Honorary Auditors, Mr. John Hudson, Fellow, and Mr. C. E. Hutchinson, Associate. They have gone through all the year's accounts, and I think you will agree with me that they have done their work very efficiently, and we are deeply thankful to them for the time and trouble they have taken in this matter.

The vote of thanks having been carried by acclamation, Mr. John Hudson and Mr. W. H. Burt, who had been nominated by the Council, were elected Hon. Auditors for the ensuing year.

The Chairman: I have also to propose that a vote of thanks be given by this meeting to the outgoing statutory Board of Examiners. Every member of the Institute who takes an interest in its proceedings must know the amount of time these Examiners give so ungrudgingly to the work of these examinations, and I ask you to give them a very hearty vote of thanks.

Mr. Langston: I take it for granted that these gentlemen who give so much time are not paid anything at all?

The Chairman: No.

Mr. Langston: Then they ought to be paid; if you will accept a motion to that effect from me as an addendum to the Report. It is only fitting that members who give so much time and attention to such an important work should be paid.

The Chairman: Notice of such a motion must be given. The motion at present is that you give a hearty vote of thanks, as I am sure you will do, to these gentlemen who have given their services gratuitously.

The motion was carried by acclamation, and the proceedings terminated.

The Annual Elections: New Nominations.

The following nominations have been made by members in accordance with By-law 33:—

As Members of Council.

ADAMS: MAURICE BINGHAM [*F.*].
Nominated by John Belcher, R.A., *Past President*, Alfred W. S. Cross, *Vice-President*, James S. Gibson, *Vice-President*, C. E. Mallows [*F.*], Andrew N. Prentice [*F.*], Rowland Plumbe [*F.*], Sir Wm. B. Richmond, K.C.B., R.A. [*H.A.*], W. E. Riley [*F.*], Sir John Taylor, K.C.B. [*F.*].

BREWILL: ARTHUR WILLIAM [*F.*].
Nominated by Alfred W. S. Cross, *Vice-President*, W. Henry White [*F.*], A. R. Jemmett [*F.*], W. G. Wilson [*F.*], Percy B. Tubbs [*F.*], Arnold S. Tayler [*A.*], K. Gammell [*A.*].

DOLL: CHARLES FITZROY [*F.*].
Nominated by R. Phené Spiers [*F.*], John Clarkson [*F.*], Rowland Plumbe [*F.*], George Hubbard [*F.*], Alfred W. S. Cross, *Vice-President*, John B. Chubb [*F.*], Henry Hall [*F.*].

DOWNING: H. P. BURKE [*F.*].
Nominated by Wm. Flockhart [*F.*], Alexander Graham [*F.*], Walter Tapper [*F.*], William A. Pite [*F.*], E. Guy Dawber, *Vice-President*, R. Selden Wornum [*F.*], C. E. Mallows [*F.*].

FARROW: FREDERIC RICHARD [*F.*].
Nominated by W. Henry White [*F.*], Percy B. Tubbs [*F.*], Alfred W. S. Cross, *Vice-President*, A. R. Jemmett [*F.*], George Hubbard [*F.*], W. G. Wilson [*F.*], Arnold S. Tayler [*A.*].

HALE, WILLIAM JOHN [*F.*].
Nominated by A. F. Watson [*F.*], Edward M. Gibbs [*F.*], Charles B. Flockton [*F.*], W. C. Fenton [*F.*], Arnold Thornely [*F.*], H. L. Paterson [*A.*], James R. Wigfull [*A.*].

JEMMETT: ARTHUR RUTHERFORD [*F.*].
Nominated by Alfred W. S. Cross, *Vice-President*, Alfred W. Moore [*F.*], E. A. Rickards [*F.*], H. V. Lanchester [*F.*], James S. Gibson, *Vice-President*, Arnold S. Tayler [*A.*], K. Gammell [*A.*].

NIELD: GEORGE ERNEST [*F.*].
Nominated by H. Dighton Pearson [*F.*], Alfred W. S. Cross, *Vice-President*, George Hubbard [*F.*], James S. Gibson, *Vice-President*, Horace J. Helsdon [*F.*], H. V. Lanchester [*F.*], W. G. Milburn [*A.*].

OGDEN: PAUL [*F.*].
Nominated by A. R. Jemmett [*F.*], Alfred W. S. Cross, *Vice-President*, W. Henry White [*F.*], W. G. Wilson [*F.*], Percy B. Tubbs [*F.*], Arnold S. Tayler [*A.*], K. Gammell [*A.*].

PEACH: CHARLES STANLEY [*F.*].
Nominated by W. Henry White [*F.*], A. R. Jemmett [*F.*], W. G. Wilson [*F.*], Percy B. Tubbs [*F.*], George Hubbard [*F.*], Alfred W. S. Cross, *Vice-President*, Arnold S. Tayler [*A.*].

PERKS: SYDNEY, F.S.A. [*F.*].
Nominated by Horatio Porter [*F.*], Wm. H. Atkin-Berry [*F.*], W. Henry White [*F.*], Ernest Flint [*F.*], Max. Clarke [*F.*], H. John Pearson [*A.*], Edw. Greenop [*A.*].

PITE: Professor BERESFORD [*F.*].
Nominated by Mervyn Macartney [*F.*], John Slater [*F.*], E. Guy Dawber, *Vice-President*, Henry T. Hare, *Hon. Secretary*, Ernest George, *President*, Ernest Newton [*F.*], Percy S. Worthington [*F.*].

SCOTT: WILLIAM GILLBEE [*F.*].
Nominated by C. E. Mallows [*F.*], Alfred W. S. Cross, *Vice-President*, H. Dighton Pearson [*F.*], George Hubbard [*F.*], James S. Gibson, *Vice-President*, Max Clarke [*F.*], W. G. Milburn [*A.*].

SOLOMON: LEWIS [*F.*].
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Regulations under the Housing and Town Planning Act.

The Local Government Board have prepared and issued, for the information of the London County Council and the town councils and urban and rural district councils throughout the country, rules "for regulating generally the procedure to be adopted with respect to the preparation or adoption of town planning schemes, and for making provision in regard to certain other matters in accordance with section 56 of the Housing and Town Planning Act, 1909."

In a covering letter, which is dated May 3rd, the Secretary to the Local Government Board states that the regulations are drawn so as to be of general application. It is probable that the circumstances of particular cases will be such as to require or justify some relaxation or alteration of the regulations in their application to the case, and the Board have, with a view to meeting any such case, included in Article 34 provisions which will enable them, subject to the proviso to that article, to dispense with or vary any requirement of the regulations where reasonable cause is shown. The Board emphasise the importance of securing co-operation on the part of the local authority with the owners and other persons interested in the land proposed to be included in a town planning scheme. "In a case in which the owners of land propose a scheme for the adoption of the local authority," the letter proceeds, "the Board consider it very desirable that the local authority should, before applying to the Board for authority to adopt the scheme, obtain from the owners definite information or undertakings on the question of any compensation which might become payable in respect of property injuriously affected by the scheme in the event of its becoming operative, whether in respect of property of the owners proposing the scheme, or of the property of any other person. Under section 58 (1) of the Act any compensation payable in accordance with the provisions of that section and section 59 would be payable by 'the responsible authority' referred to in section 55 (2), that is to say, the authority who are to be responsible for enforcing the observance of the scheme and for the execution of any works which under the scheme or Part II. of the Act are to be executed by a local authority. In regard also to a scheme proposed to be prepared by a local authority, it appears to be a matter of the greatest importance that these provisions as to compensation should be carefully borne in mind from the earliest stage of the proceedings, and that, as in the case of the proposed adoption of a scheme, the local authority should endeavour to secure definite agreements with any person who may be affected by the proposals."

"The Town Planning Review."

Professor S. D. Adshead [*F.*], writing a few days ago, says:—

"In connection with the work of my department of the School of Architecture, we are issuing a Journal to be called *The Town Planning Review*, which will be entirely devoted to town planning and city and suburban development. It will be a quarterly publication, and will contain about eighty pages of matter and numerous illustrations. It will be used as a medium for circulating the information which the School of Civic Design and Town Planning has by its unique position been enabled to collect. It will also publish the results of the research which it is part of the work of the School to undertake. The journal being essentially educational in character, it is hoped that it will command the support of contributors otherwise unavailable. In its scope it will recognise the different factors which town planning connotes—the æsthetic, sociological, engineering, and hygienic. In particular it will collect and illustrate the town-planning schemes of this country, many of which we may expect very shortly to be sufficiently advanced for illustration and criticism. We hope to include the preliminary suggestions in connection with some of these in our next issue."

Since the above announcement the first number of the new review has made its appearance, edited by Mr. Patrick Abercrombie in collaboration with Professors C. H. Reilly and S. D. Adshead. The School of Civic Design at the University of Liverpool owes its foundation, it will be remembered, to the munificence of Mr. W. H. Lever, and the editors rightly conclude that as in England there is no journal devoted to town planning, not only is there ample scope for one, but that by its means the School will best be fulfilling the educational ideal implied in Mr. Lever's gift.

The contents of the first number include (1) An Introduction to the Study of Civic Design, by Professor Adshead; (2) A Comparative Review of Examples of Modern Town Planning and "Garden City" Schemes in England, by Patrick Abercrombie; (3) The Town Planning Act: Its Legal Aspect, by H. Chaloner Dowdall, B.C.L., Barrister-at-Law; Its Administration, by Professor Adshead; (4) A Suggestion for the Reconstruction of St. John's Garden, St. George's Hall, Liverpool, by Professor Adshead; (5) Contemporary Town Planning Schemes in America, by

Professor C. H. Reilly, and Messrs. Burnham and Bennett; (6) The Sociological Aspect of Town Planning, by F. J. Marquis, B.Sc.; (7) Reviews of Current Periodicals and New Books; (8) Chronicles of Passing Events; (9) The Liverpool City Guild. A clever sketch of the proposed Plaza, Michigan Avenue, Grant Park, by Jules Guérin, printed in colours, forms a pleasing frontispiece. The editors invite contributions from all sources likely to aid in formulating useful and right ideas in this somewhat new and unexplored field.

Well written, well illustrated, and well printed, this first number of *The Town Planning Review* reflects credit upon all concerned in its production. The new venture should secure the support of everyone concerned in the working out of problems of town planning and town development. The price is 2*s.* 6*d.* net.

Proposed Society for the Promotion of Roman Studies.

In *The Times* of the 4th inst. appeared a letter written on behalf of the Council of the Hellenic Society and the Committee of the British School at Rome, giving the result of an inquiry as to the strength of the demand for a new society which should do for Roman studies the work which the Hellenic Society does in relation to the archæology, art, and history of Greece. The communication is signed by Professor Percy Gardner, Litt.D.; Mr. G. H. Hallam, Professor F. J. Haverfield, LL.D.; Mr. G. F. Hill, Mr. George A. Macmillan, Litt.D.; Mr. J. ff. Baker-Penoyre, Professor J. S. Reid, Litt.D.; and Mr. A. Hamilton Smith. The result of the inquiry has been that sufficient promises of support have been received to justify the foundation of such a society.

An interchange of views has taken place between representatives of the Hellenic Society, the Classical Association, and the British School at Rome as to the best means of carrying out the proposed object. These representatives came to a unanimous agreement in favour of founding a new society, the aim of which should be to conduct a Roman journal in harmony with the periodicals controlled by the bodies mentioned (especially the *Journal of Hellenic Studies* and the *Classical Quarterly*), to form a library in union with the Hellenic Society, to hold meetings, to assist (as soon as the funds allow) the British School at Rome, and generally to promote Roman studies. The co-operation thus ensured in principle between the new society, the Hellenic Society, and the Classical Association will prevent that overlapping of publications and of work which causes so much waste of energy. It is hoped that further co-operation between the three societies may be obtained by such interchange of privileges or preferential rates of subscription as may prove desirable and possible.

To give practical effect to this, the representatives of the three bodies named have agreed in asking the Hellenic Society to take the steps necessary for the foundation of a Society for the Promotion of Roman Studies. A meeting will be held at 4.30 o'clock on Friday, June 3rd, at the Lecture Theatre, Civil Service Commission, Burlington Gardens, W., to which all who are willing to support the movement are invited. Dr. F. G. Kenyon, Director of the British Museum, will take the chair, and those who are definitely prepared to join the new society will be invited to adopt the following resolutions:—

1. That a society be formed for the promotion of Roman studies.

2. That the object of the society be to deal with the archæology, art, and history of Italy and the Roman Empire down to about A.D. 700, by publishing a journal, forming a library, holding meetings, assisting (as soon as funds allow) the British School at Rome, and generally promoting the better knowledge and understanding of the Roman world.

3. That the constitution follow, *mutatis mutandis*, that of the Hellenic Society, that the annual subscription for ordinary members be one guinea, and that for the present no entrance fee be imposed.

4. That a provisional committee be appointed to draw up the constitution of the society, and to nominate the first officers and council.

5. That it be an instruction to the council of the society, when appointed, to approach the Hellenic Society, the Classical Association, and the Schools at Athens and Rome with a view to arranging:—

(*a*) For the conduct of the periodicals controlled by these bodies as friendly and allied publications normally occupying distinct provinces of learning.

(*b*) For reciprocity with the Hellenic Society in respect of libraries, collections of lantern slides, and the like.

(*c*) For the establishment of such further co-operation between the societies as may seem desirable and possible.

Any correspondence in connection with the society should, for the present, be addressed to the Secretary, Royal Archæological Institute, 20 Hanover Square, W.

Mr. A. S. Cope, R.A. [*H.A.*].

At a General Assembly of Academicians and Associates held on the 4th inst., Mr. Arthur Stockdale Cope was elected to full rank as Royal Academician. Mr. Cope is a son of Mr. Charles West Cope, R.A. Educated at Norwich and Wiesbaden, he studied at Carey's and the Royal Academy Schools, and he has been a regular exhibitor at the Academy since 1876. He has chiefly devoted himself to portrait painting, and his subjects have included the King, the German Emperor, the Lord Chief Justice, the Archbishop of Canterbury, and Lord Kitchener. In the present exhibition he has several pictures worthy of notice, including portraits of Lord Carrington, Mr. Akers-Douglas and Colonel Carlile, and the portrait of Mr. T. E. Collcutt, *Past President*,

which was painted by subscription, and presented to the Institute at the Second General Meeting of the present Session.

Obituary.

JOHN WILSON WALTON-WILSON, of Shotley Hall, Northumberland, who died on the 14th April, at the age of 87, was elected Associate of the Institute in 1860, Fellow in 1882, and was placed on the list of Retired Fellows in 1892. Mr. Walton-Wilson served his articles with the late Henry Roberts, architect of Fishmongers' Hall. He was a student of the Royal Academy under Professors Cockerell and Donaldson, and was awarded the silver medal for a measured drawing of the Strand front of Somerset House. From 1847 to 1849 he was in the office of the late Sir Charles Barry assisting on the work of the new Parliament Houses. The years 1849 to 1852 he spent travelling in France, Italy, Egypt, and Nubia to the second cataract, Palestine, Turkey, Greece, &c. He commenced practice at 18 Adam Street, Adelphi, in 1853. His principal works were St. Augustine's Church, Alston, Cumberland; St. James's Church, Riding Mill, Northumberland; Restoration of the Priory Church of St. Mary, near Monkton, Yorkshire; mansions in various parts of England; schools at Battersea for the London School Board. He was afterwards for two years in partnership with Mr. E. R. Robson, during which time he erected Shotley Hall, near Gateshead, which eventually became his own country seat.

Town Planning in Greater London.

Sir Aston Webb, C.B., R.A., Mr. H. V. Lanchester, Professor Beresford Pite, and Mr. John W. Simpson were appointed by the Council to represent the Institute at the Conference on Town Planning in Greater London, organised by the National Housing and Town Planning Council, and held yesterday at the Caxton Hall, Westminster.

Lightning Conductors.

Messrs. Crosby Lockwood & Son are issuing a second edition of Mr. Killingworth Hedges' *Modern Lightning Conductors*. The work serves as an illustrated supplement to the Report of the Lightning Research Committee of 1905, and contains some additional notes as to methods of protection and specifications. New matter in the second edition includes the Rules for Lightning Rods recently drawn up for the Phœnix Fire Office. These rules follow the recommendations of the Lightning Research Committee's Report, but an endeavour has been made to remove any uncertainty as to the Committee's suggestions. A chapter has been added on the Effects of Lightning on Human Beings, with notes as to where to seek safety during a storm; also on Upward Strokes of Lightning, and other interesting phenomena.

CORRESPONDENCE.

PROFESSOR LETHABY'S PAPER [p. 469].

To the Editor JOURNAL R.I.B.A.,—

SIR,—My friend Mr. Schultz must have heard imperfectly my remarks during the discussion upon Professor Lethaby's Paper, if he is under the impression that I then expressed the views which he so unexpectedly imputes to me.

I venture again here to affirm that good construction and good design go hand in hand, and are part of one and the same thing, that construction is the basis of all fine mediæval architecture, and that the scheme of a great cathedral is constructive in its essence, Gothic architecture being the romance of construction.

It is a pity that Mr. Schultz as a humble disciple of the master should persist in refusing to follow his example in becoming a member of the Institute, for I am sure that we should value his unwearying advocacy of healthy opinion.

BERESFORD PITE.

WHITGIFT HOSPITAL, CROYDON.

To the Editor JOURNAL R.I.B.A.,—

SIR,—It will be within the remembrance of your readers that not long since a very determined attempt was made—and by the Town Council itself—to secure the demolition of this delightful old block of almshouses. By a fortunate stroke at the psychological moment I was able to obtain and publish a very firm letter from the chairman of the Royal Commission on Historic Monuments now sitting. This no doubt prevented the Town Council from confirming a previous vote in favour of demolition. The danger passed—and as we hope for ever. But the expense of holding meetings, advertising, circularising, &c., was heavy, and if any readers care to send me a small subscription I shall have great pleasure in handing it to the Croydon Antiquities Preservation Society, when an official receipt will be sent. The members of that Society and their friends did well in that as in other directions, but I personally feel that this matter is one of more than local interest, as was, in fact, shown by the able assistance rendered by the Institute and other societies, and the professional and other Journals. This assistance, I can assure you, we valued highly, and for it we were and are profoundly grateful. The surplus of the Preservation Fund, if any, we shall devote to the actual *structural* preservation of the Old Palace here, a work now proceeding under the able direction of Messrs Banister F. and H. Phillips Fletcher. Yours faithfully,

77 *Park Lane, Croydon.* C. H. BRODIE.

REVIEWS.

CLASSIC ART.

The Architectural Forms of the Classic Ages, comprising the principal examples of the Orders of Columns and their Entablatures. By Constantin Uhde, late Professor at the Technical High School at Braunschweig. Second Edition, revised by R. Phené Spiers, F.S.A. Containing 76 plates in colour, collotype, and photo-lithography, with descriptive letterpress. Fo. Lond. 1909. Price £3. [Batsford, 94 High Holborn.]

The second edition—enlarged by the addition of several new plates and revised by Mr. Spiers—of the late Professor Uhde's monumental work on Classic Art has now been issued by Mr. Batsford.

Primarily intended to facilitate the comparison of the relative sizes of various well-known buildings of ancient Greece and Rome, the accompanying descriptive matter has been condensed as much as possible, but, notwithstanding this, Professor Uhde's portfolio of 76 plates forms a valuable and almost indispensable supplement to the many sumptuous books which deal, in a more comprehensive manner, with the splendid monuments of the Classic Age.

Numerous beautifully illustrated and reliable works on the architectural antiquities of Greece and Rome—as, for example, Inwood's *Erechtheion*—are of little value for the purpose of comparing the proportions of the architectural parts of the structures selected for illustration, owing to variations in the scale of the drawings and to the fact that the dimensions given in the different books are in English, French, German, and Italian standards.

And thus when, in order to obtain a general impression of the combined effects of different buildings, the comparison of separate structures, or of whole groups of structures, is desired, the result can only be attained by redrawing various illustrations to one uniform scale.

In order to avoid this tedious process Professor Uhde has adopted "an absolute unit of height" for all the representations of antique structures comprised in his series of illustrations; the height of a building, an arcade, or an order of columns being uniformly taken at $0{\cdot}333 = \frac{1}{3}$ m. If, therefore, "the plates are laid side by side so that the base lines form a straight line, the differences in the heights and the general disposition of the separate parts are readily seen." In order to obtain at least an approximately correct idea of the actual height of a structure in comparison with the drawing, the given absolute height must be multiplied by three, and the product will represent the ratio of reduction of the drawing. For example: In the case of the Arch of Septimius Severus which has "an actual height of 20·79 m., the scale of reduction is found by multiplying the height by three—$20{\cdot}79 \times 3 = 62{\cdot}37$—therefore the actual structure is 62·37 times as large as the drawing." The separate architectural parts are drawn to a scale ten times as large as that used for the whole building, which makes a comparison of these parts as easy as one in which the entire structure is concerned.

Some well chosen examples illustrate the gradual development of the orders of ancient architecture from the earliest times. Thus, Plates I. to III. comprise typical details of Egyptian, Assyrian, and Persian architecture, showing, by their mode of construction, the beginning of the artistic forms which reached their highest stage of development in Grecian architecture. Plates IV. to XIV. represent specimens of Greek and Roman architecture, culled from some of the most beautiful structures erected after the time of Pericles; and in Plates XV. to XXII. examples are given of the Doric order, from the period it was first known to be used to its final decadence.

The next group of illustrations (Plates XXIII. to XXXII.) deals with columns of the Ionic order as treated in Attica and the Asiatic Ionic provinces. Then follow numerous details from well-known buildings of Grecian, Grecian-Roman, and the Roman orders (Plates XXXIII. to LIII.), which (*inter alia*) illustrate the development of the Roman Corinthian style in all its splendour.

Roman triumphal arches and amphitheatres, in which the true Roman style, with its arch and vault construction, first appeared, form the subjects of Group VI. (Plates LIV. to LXIII.).

Plates LXIV. and LXV. are of a most interesting and instructive character. The former represents the orders as used in various buildings, drawn to a uniform scale for the comparison of the relative sizes of the structures they partially depict, whilst the latter illustrates the following buildings, all of which are drawn to the same scale, viz.:—The Arch of Constantine, the Arch of the Sergians at Pola, the Arch of Septimius, the Theatre of Marcellus, and the Colosseum at Rome, and the Amphitheatre at Pola.

Plates LXVI. to LXX. comprise illustrations, to a large scale, of parts of Greek and Roman buildings which it has not been possible to reconstruct in their entirety, or of structures which, apart from some interesting detail, contain nothing of great architectural importance.

The last group (Plates LXXI. to LXXVI.) consist of drawings representing conjectural restorations of buildings of the Classic Age, such as the Acropolis of Athens, the Parthenon, the Temple of Zeus at Aizani, the Choragic monument of Lysicrates, the Thermæ of Caracalla at Rome (of which there was no record in the former edition), and other buildings of equal interest.

The original text has been carefully revised throughout by Mr. Spiers, and the work in its now extended form will prove of additional value to all students of Classic Art.

ALFRED W. S. CROSS [*F.*].

SOUTHWELL MINSTER, NOTTS.

Nottinghamshire. By Everard L. Guilford. Little Guides Series. Sm. pott 8o. Lond. 1910. *Price* 2s. 6d. *[Methuen & Co., 36 Essex Street, Strand, W.C.]*

The series of "Little Guides" published by Messrs. Methuen comes as a boon and a blessing to men, to those that motor and those that cycle. For the sum of half-a-crown one sees at a glance whether a village is worth a visit, and what are the special objects of interest in the church. How badly such guides are needed, even by experts, was shown at the visit of the Royal Archæological Institute to one of the Barton churches last year, where not a single member noticed the presence of a stone Rood, Mary and John, carved on the mullions of an aisle window; similar oversights occurred in other churches. The "Little Guides," of course, vary in merit; at the top we should place Mr. Wells' *Oxford and its Colleges* and Mr. Brabant's *Sussex*; beside them Mr. Guilford's *Nottinghamshire* will rank high. He seems to have intimate, personal knowledge of every village in the county. I have also tested his accounts of Newark and Southwell, and found them excellent. There is an admirable introduction on the physical features and geology of the county, and the account of the church fittings is probably the most complete in existence for any county. The illustrations are charming; one of them, showing the "eagre" rushing up the Trent, is of special interest; there is also a large map and 246 pages of letterpress. I have come across mistakes here and there; what book is free from them? Certainly not any of mine; and instead of listing them to establish for myself a reputation for meticulous accuracy, I will try to make a few additions to Mr. Guilford's account of Southwell Minster.

The east limb of the minster was arranged by Mr. Ewan Christian, and in the opinion of everybody, so far as I know, rightly arranged, with the altar against the eastern wall, with the two unaisled eastern bays forming a presbytery, and the western bays forming a choir. What looks like a precedent for this arrangement may be seen at Rochester, where the unaisled eastern portion has undoubtedly always been a presbytery; it was because the presbytery was to be there that the Norman crypt was extended eastward as a foundation for it, that its high altar might not be in a hole. The planning of Southwell, however, points to something very different. If it be compared with that of Worcester, Salisbury (the original plan), Beverley, and Pershore (which Southwell closely resembles both in plan and elevation) it will be found that in all these the high altar was in a line with the eastern transepts; that behind it was a procession aisle, and behind that again an eastern chapel. If we reconstitute the plan of Southwell in accordance with these precedents, we shall have, beginning at the west, the choir placed in the first two bays (two bays would be quite sufficient for the sixteen canons, who were hardly ever resident); then would come a dignified presbytery of three bays; then a procession path of one bay; then an eastern chapel of two bays. If the above position of the high altar be accepted, it would follow that the five sedilia originally would be placed south of the high altar—i.e. under one of the arches between the south aisle and the presbytery. It is true that at present they are placed against the south wall of the western bay of the present presbytery; but they thereby block up the lower part of one of the thirteenth-century windows, which at once raises the presumption that they are not *in situ*. And this presumption is strengthened by a statement in Clarke's *History of Southwell Minster*, published in 1839, in which he distinctly says that "the situation of the sedilia was formerly occupied by an oak screen." This has always been taken to mean that the oak screen was placed against the wall just as the sedilia are now. But if the small portion of wall visible above the sedilia be examined, a block will be seen with a corner cut out. On the north side of the present presbytery, opposite to the sedilia, several such blocks are to be seen, and the whole surface of the masonry has been disturbed all the way up from the pavement to about the level of the capitals of the piers of the aisle to the west. Plainly some timber work, very substantial and very lofty, has been pegged into both the northern and southern walls. In all probability this was a broad and very lofty screen which supported a platform and ran across the entrance of the present presbytery. The choir boys used to scamper across the screen—this points to its having had a platform—and one of them being killed, the screen, says Mr. Clarke, was removed. For this lofty screen we find a parallel at Ottery St. Mary, where a lofty stone screen, once, no doubt, carrying an organ for the pricksong services in the Lady chapel, still exists in front of the latter. As for the sedilia, examination shows that the upper portion with the pinnacles has at some time been cut away to get a solid horizontal surface. The inference is that this was done when they stood under an arch of the choir, in order to utilise them as a support for a gallery or upper pew. When the screen was demolished, the sedilia were removed to the southern wall against which it had abutted; "the sculptured ornaments and figures"—I suppose those, or some of those, which had been cut off—being brought "from various parts of the interior." Or Mr. Clarke's words may mean that the sedilia, after being used as support for a gallery or pew, had in some later alterations been taken down and the pieces stowed away elsewhere in the church, and were now re-erected. As for the eastern chapel, it was no doubt a Lady chapel. The services to Our Lady became more and more musical, harmony being employed instead of the plainsong of the Mass. At Gloucester the Lady chapel has little transepts for organs and choristers; and as the whole body of dignitaries had to attend our Lady's services just as much as High Mass, a long and spacious chapel was needed. In the end, at Westminster Abbey, we find as many stalls in the Lady chapel as in the monastic choir. This is the reason why big eastern chapels everywhere in England replaced the little eastern chapels of the early monastic, collegiate, and cathedral churches. Though, however, the eastern chapel at Southwell would be a Lady chapel, it does not follow that it would contain an altar to Our Lady. At Salisbury the Lady chapel contained three altars, but none of them were dedicated to Our Lady; and at Lincoln a note in the Chapter Acts of 1428 mentions the purchase of organs "where the daily Mass of the blessed Mary the Virgin is sung in the chapel of St. John the Baptist"; this was apparently under the great east window of the retrochoir. Nor is it an objection that, the high altar at Southwell being dedicated to St. Mary, there was no need for a Lady chapel; for Salisbury, which is dedicated to St. Mary, has a Lady chapel.

FRANCIS BOND [*Hon. A.*].

REINFORCED CONCRETE.

Reinforced Concrete: Theory and Practice. By Frederick Rings, Architect and Consulting Engineer. 8o. *Lond.* 1910. *Price* 7s. 6d. *[B. T. Batsford, 94 High Holborn, W.C.]*

In this book the author has endeavoured to give such a general view of his subject as may enable the non-specialist student to acquire a clear understanding of general principles and practice without wading through an unnecessary mass of detail.

With this object in view he has given a brief account of the materials used and of the methods of executing reinforced concrete work, and has followed this by chapters embodying formulæ for most of the cases that are likely to be met with in ordinary practice. These are illustrated by fully worked out numerical examples.

A special chapter is devoted to particulars of patent bars and systems, and the volume concludes with a large number of useful memoranda, tables, and labour-saving diagrams. Among the last are diagrams enabling the reader to arrive at the cost of a cubic yard of concrete of any given proportion of stone, cement, and sand when the cost per cubic yard of the individual materials and the proportions of the mixture are given.

A pocket at the end of the book contains a "Ready Reckoner" (printed upon celluloid), by which the depth of slab and amount of reinforcement required in ordinary floors can be readily ascertained without calculation.

In a book of only about 200 pages, in which are more than that number of diagrams and illustrations, there is not room for superfluous words. But no essential is omitted, and the student will find that a careful study of this small volume will put him in possession of a working knowledge of the subject with a minimum expenditure of time and labour.

MATT. GARBUTT [*F.*].

ARCHITECTURAL TRAINING, ÆSTHETIC AND STRUCTURAL.

By Prof. WM. H. LAWRENCE, Massachusetts Institute of Technology.*

Architecture takes its place among the broadest of the professions. Certainly no other embraces wider points of view or demands of its representatives greater diversity of tastes and attainments. Based fundamentally upon the principles of art, and in fact recognised as one of the greatest of the fine arts, architecture nevertheless for its fulfilment requires a knowledge of much that is scientific, and calls for the solution of many intricate problems in engineering.

To carry out logically and well an architectural design, to develop it step by step to completion, needs a mind not alone capable of grasping and wisely meeting the utilitarian demands of the problem, but it must be a mind trained to an appreciation of the beautiful, brilliant in creative imagination, discreet in its tastes, and well balanced in its judgment. In addition to these qualities there must be a clear understanding of the methods of engineering, so that as the conception of the building grows, there shall grow with it a conception of the framework by which it is to be supported. This framework should bear the same relation to the building that the skeleton does to the human body. The supporting skeleton and the enclosing form are the two essential elements of the design; each should be the complement of the other, and the harmonious combination of the two is the requisite for a perfect whole. In no other way can there be an architectural composition worthy of the name.

All the greatest and most beautiful of the architectural masterpieces of ancient and mediæval times are but the refinements of structural necessities. The so-called architectural styles themselves might well be defined as types of the most perfect adaptation of available materials to the requirements, tastes, and knowledge of an epoch. It is only necessary to cite one or two examples to illustrate this truth. Take for example the ancient temple; built of stone, low and broad, with massive columns and heavy walls supporting stone lintels of necessarily short spans; simple, dignified, adequate to the needs of the period, and of a wonderful beauty and refinement of form never surpassed. Contrast with this the Gothic cathedral of mediæval times; still of stone, but a type far different from that of the early temple; the change being due primarily to a knowledge of the principles of vaulting, the use of the flying buttress, the introduction of glass, and the vastly different conditions and requirements of the age. But the character of the cathedral as well as the temple was fixed by the structural framework, and is in its essentials but the result of the refinement of lines and masses

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imposed by conditions of equilibrium. This does not imply for a moment that the architect gives his first thought to the structural details of the problem. Quite the contrary is probably true, and rightly should be; but the properly trained mind will have a clear conception of the structural possibilities and their limitations, and this will be a dominating influence in the development of the design.

In modern times, and especially within the last half-century, the conditions have become so complex, the possibilities so great, that the structural limitations on plan and form which governed and guided designers of the early ages can no longer be said to exist. The introduction of rolled-steel shapes opened the way for wonderful changes in architectural methods. Buildings hardly dreamt of before became commonplace affairs. There seemed almost no limit to what could be done. Structures could be carried with ease and rapidity to heights taller than the tallest monuments hitherto erected. Architecture, at least in this country [the United States], went crazy, and it was not altogether the fault of the architect. He was simply the victim of circumstances, of the influence of the age in which he lived. The congestion in the great cities, the enormous value of the land in business centres, the demand for higher buildings to bring through greater floor areas larger returns on investment, and finally the coming of the new material—steel—by means of which this demand could be satisfied, were factors working to bring about the change. The age was one of speed and hurry. There was little time to deliberate. The architect was forced to plunge in, and soon found himself beyond his depth.

The new conditions had been thrust upon him suddenly with no opportunity to prepare for them. The problems that arose in the construction of the new type of building could not be solved in a minute. On the structural side they were complex and beyond his knowledge. It required all his time to plan the general arrangement of the building. From the artistic standpoint alone it was a new and engrossing problem. He needed help, an associate architect specialising in engineering who could work in conjunction with him. The problem had become too big for one man to cope with; architecture had reached a point where her representatives must be specialists. But there were no architectural specialists in construction; they had not been needed up to this time. So the architect did the best he could do under the circumstances; he turned the structural half of his problem over to another profession, that of the civil engineer, contenting himself with what was left, and giving little thought to the way in which the building he was designing would be supported. Anything could be built in steel; its adaptability was practically unbounded; that part was the engineer's problem, and it was usually left to him. The architect did not understand the engineer, and the engineer neither understood nor appreciated the architect. The true function of the structural design was lost. The relation between the skeleton and the form no longer existed. The architectural sense became paralysed by the suddenness and enormity of the changed conditions; some frightful architectural anomalies were perpetrated. Architecture became a sham. Buildings masquerading as heavy stone structures proved upon examination to be thin terra-cotta envelopes supported on slender steel columns; the apparently heavy walls and piers turned out to be purely ornamental, and instead of helping to support the building were simply so much added weight to be carried by the steel columns of which their massive appearance gave no suggestion. All reasonableness of architecture had disappeared. Old forms belonging to far different types of structures were plastered without reason to a slender metal framework which of itself may have had no unity, and whose only purpose was to support the freak conception of the designer. Such structures could be made to stand, to yield comfort to those who lived in them, to return proper rentals to the owner, and to the casual observer to present nothing objectionable or unpleasant to the eye; but considered from the point of view of sound architecture they remain as insults to the profession.

The influence of such conditions was naturally felt much more strongly in this country than in Europe. We had few traditions of art. Our people as a whole cared little about architecture, and knew even less; they were satisfied with a purely utilitarian solution of the problem. Even our architects had for the time being lost their heads; yet the structures built under these influences, bad as they are, have a meaning and a function in the general progress. They represent the first steps in the working out of a new type.

Fortunately, we are gradually recovering our normal balance. The confusion of the new age is beginning to clear, and many earnest efforts have in recent years been made, with more or less success, to devise a form of building that should adapt itself logically to the framework of steel. The architect is learning more of engineering, the engineer is becoming more and more of an architect, and each is beginning to realise that to do anything really worthy of the name of architecture they must work in the closest relation. Many architects are specialising in structural work, and there is a steadily increasing demand for men educated as architects but with a thorough training in engineering principles and methods.

We are still a long way from solving the architectural problem involved in the use of the new material, and it will be many years before the solution is so well established as to mark another epoch in the history of architecture and to merit the name of a new architectural style. But the time has long since gone when one man can hope to

specialise in both branches. Like the old family doctor with his one-horse chaise and his bag of medicines ready to cater for all human ills, the old-time architect has passed. It is an age of specialists in all professions, and to-day architecture naturally divides into two great branches, the first of which for want of a better name may be called the æsthetic branch, the second the structural. These two are so intimately related, so closely interwoven, that one is a necessary complement of the other, and no man should be called an architect who is not master of at least the basic principles of both.

With this point of view in mind the course in architecture at the Institute is divided into two options, one leading to specialisation along the æsthetic lines, the other along the structural. The structural work in the Department is arranged to provide instruction suited to the needs of both options. In order that all students may have a knowledge of the fundamentals of the structural side of their profession, the preparatory study leading to the structural courses is practically the same for both options during the first two and a half years. It includes mathematics, physics, and applied mechanics. At the middle of the third year the work of the two options diverges, becoming more and more practical in its application in each as it proceeds, but varying very much in the amount of time devoted to it in each option.

In the æsthetic option the time diminishes in relation to that given to the æsthetic courses, the required structural work ending with a course in elementary constructive design in the first term of the fourth year. Opportunity is offered, however, to continue this course through the second term, the work being optional with that in fourth-year modelling. More advanced structural courses may also be taken by the graduates of the æsthetic option who return for a post-graduate year.

In the structural option the time devoted to structural subjects, relative to that devoted to other work, increases very rapidly from the point of divergence of the two options, until during the senior year by far the greater part of the student's time is taken up by the study of his speciality. Although the work in applied mechanics, strength of materials, and mechanical laboratory is taken in the Department of Applied Mechanics, and that in materials, foundations, and theory of structures in the Department of Civil Engineering, yet the course in structural design, which occupies practically every afternoon of the senior year, is given in the Architectural Department. All the problems are studied from the architectural view point. The work is done in the large drawing-room where the student finds himself closely associated with the students of the æsthetic option and in an atmosphere emphatically architectural. Thus the instruction never ceases to be that of the architect, and the student of whichever option is imbued with a love and appreciation of the beautiful, which is, after all, the foundation of all things in architecture. The art element is the one essential without which the architect cannot exist, and the man who elects structural architecture for his profession should be one to whom the beautiful in art makes a strong appeal. It is an essential part of his profession; without it he may make a most excellent engineer, but an architect, never.

ALLIED SOCIETIES.

Bristol Society of Architects.—The Annual General Meeting of this Society was held on the 25th ult. Mr. Mowbray A. Green [*F.*], President, was in the Chair, and gave an address dealing with the right and intelligent application of the Traditional Styles to present-day Design. The Annual Report, which was read by the Hon. Secretary, Mr. T. H. Weston [*F.*], states that the various activities of the Society have been fully maintained during the period under consideration, and it has enjoyed the very general and loyal support of all its members. The membership numbers 58, a net decrease of 9 for the year. In accordance with the resolution, the very instructive Address to Students given by the President at the last Annual Meeting was printed in pamphlet form and circulated. The programme of lectures for the winter months, as laid down by the Council, has been duly carried through in every particular. The following is a list of the subjects dealt with, and in every case they were handled by gentlemen of special experience and training:—"Town Planning and Garden Cities," Mr. Raymond Unwin; "The London Churches of Sir Christopher Wren," Mr. Arthur Keen; "Rome and Paris: their Architectural Relations," Mr. G. Salway Nicol; "Recent Explorations of the Roman Forum," Mr. St. Clair Baddeley; "Reinforced Concrete," Mr. J. Markham; "English and Italian Garden Architecture," Mr. T. H. Mawson. Several lectures which were not of too technical a nature, and therefore appealed to a wider audience than members of the Society, were made known by means of the daily papers. This resulted in a very fair attendance, and on one or two occasions a very good attendance of the public. In October last the Society was invited to support the restoration and improvement scheme of the Bristol Fine Arts Academy. It was resolved that the President, Mr. Mowbray Green, should attend the Lord Mayor's Meeting held in connection with the scheme, and announce that the Society was in full sympathy with the proposals and prepared to make a donation of £50 towards the cost of the alterations. The question of a Chair of Architecture at the newly chartered University of Bristol has been considered by the Council on two occasions, and at their last meeting the following resolution was carried:—"The Bristol Society of Architects desires to ratify its resolution of 17th March, 1908, and is of opinion that the establishment of a Chair of Architecture at the University of Bristol will prove highly beneficial to the art and practice of architecture in the city and district." The Report says in conclusion that there can be no doubt that the Bristol Society, together with the other Allied Societies, has done good pioneer work in the way of drawing together

architects not otherwise connected with the Institute, and it seems probable that in connection with Statutory Registration and other important movements the Society will continue to have a large sphere for usefulness in the future.

Liverpool Architectural Society. — The Annual Report, which was brought before a General Meeting on the 18th April, states that the present membership of the Society consists of 51 Fellows and 73 Associates—a total of 124. The Council now make very careful investigation into the qualifications of candidates for membership. The Articles of Association provide that the Society may by resolution require that candidates for Associateship shall have passed such architectural examinations as the Council may approve. The Council do not recommend so rigid a procedure at the present time, but they propose to require from candidates as Associate or Student, who may not have already done so, an assurance that they will forthwith prepare and present themselves for some approved architectural examination. A communication has been received from the Master Builders' Association drawing the attention of the Council to the issue of bills of quantities in which items were described in a general and inclusive way and without sufficient detail to admit of being properly priced. The Master Builders' Association, in a further communication, submitted a protest against the custom of the architect of the works being appointed as final arbitrator in connection with building contracts. The Council accepted the views of the Master Builders' Association in each case, replying as to the first letter to the effect that they quite agreed that bills of quantities should be prepared in sufficient detail as to admit of fair and proper pricing, and as to the second letter, recommending that master builders should require the use of the contract form agreed upon by the Royal Institute of British Architects and the Institute of Builders and the National Federation of Building Trade Employers, and that they should refuse to sign a contract unless an independent arbitrator is appointed. The R.I.B.A. having appointed a Special Committee to consider the question of the responsibility of architects with regard to dry rot, submitted the conclusions of the Committee for the consideration of the Council of this Society. The Council replied strongly disapproving of the proposals of the Institute. The features to which the Council objected have been omitted in the R.I.B.A. pamphlet recently issued. The Council received a letter from the R.I.B.A. suggesting that this Society should appoint a Committee in connection with the administration of the Town Planning Bill, but the Council decided to delay taking any action in the matter until the work which the Society may undertake is better understood. The cordial relations between this Society and the Manchester Society of Architects have continued, and have been of great assistance in formulating and emphasising the views of the Northern profession on matters of general architectural interest. The Council desire to place on record the valuable work done by the retiring President, who has most ably represented the Society at the Council Meetings of the R.I.B.A., at which he has been a frequent attendant. The munificence of Mr. W. H. Lever to the University of Liverpool, by which the School of Civic Design is placed upon a permanent basis, and the old Blue Coat School Buildings, now to be called Liberty Buildings, are preserved as the home of the School of Architecture, is an act of liberality which calls for the appreciation of all interested in the art and profession of architecture. The Council offered prizes of £7 and £3 for measured drawings of well-known Liverpool doorways, but the competition met with a very limited response.

MINUTES. XIII.

At the Seventy-sixth Annual General Meeting (being the Thirteenth General Meeting of the Session 1909-10) held Monday, 2nd May, 1910, at 8 p.m.—Present: Mr. James S. Gibson, *Vice-President*, in the Chair; 19 Fellows (including 7 members of the Council), and 19 Associates (including 2 members of the Council)—the Minutes of the Meeting held 18th April 1910, having been already published, were taken as read and signed as correct.

The Chairman announced that H.R.H. the Prince of Wales had become Patron of the Institute.

The decease was announced of William Owen and John Wilson Walton-Wilson, *Retired Fellows*.

The decease was also announced of Campbell Douglas, *Past Vice-President*, and on the motion of the Hon. Secretary a vote of sympathy and condolence was passed to the relatives of the late Fellow.

The Secretary announced that the following candidates had been nominated for election—viz.: As FELLOWS (4): Ernest Robert Barrow [*A.* 1894, *Ashpitel Prizeman* 1893]; Arthur William Cooksey [*A.* 1888]; William Bruce Dawson [*A.* 1901]; Horace Gilbert [*A.* 1890]. As ASSOCIATES (8): George Luard Alexander [*Special Examination* 1909]; Walter John Beall [*Colonial Examination* 1909], Pietermaritzburg, Natal; Noel Waugh Hadwen [*P.* 1905, *S.* 1909, *Qualified* 1909], Triangle, Yorks.; Joseph Fearis Munnings [*Special Examination* 1909], Dacca, India; David John Roberts [*Special Examination* 1909], Birmingham; Hartley Sutcliffe [*Colonial Examination* 1909], Melbourne, Australia; Edward Alexander Taylor [*Colonial Examination* 1909], Sydney, N.S.W.; Morris Thompson [*P.* 1901, *S.* 1904, *Qualified* 1909], Doncaster.

The Chairman having formally presented and moved the adoption of the Annual Report for the official year, the motion was seconded by Mr. Edwin T. Hall [*F.*].

Mr. William Woodward [*F.*] having reviewed the Report at length, various points raised by him and by Mr. G. Ernest Nield [*F.*] and Mr. H. Hardwicke Langston [*A.*] were replied to by Mr. W. H. Atkin-Berry [*F.*], Chairman of the Practice Standing Committee, Mr. W. A. Forsyth [*F.*], Hon. Secretary of the Art Standing Committee, Mr. Matt. Garbutt [*F.*], Hon. Secretary of the Science Committee, Mr. C. E. Hutchinson [*A.*], Hon. Auditor, the Secretary, and the Chairman.

Finally, the Meeting unanimously

RESOLVED, That the Annual Report of the Council for the official year 1909-10 be adopted.

Mr. H. Hardwicke Langston [*A.*] having asked the Chairman for a definition of "Architectural Copyright," the Chairman referred the questioner to the statements regarding the subject prepared for the Committee of the House of Commons by Mr. John W. Simpson [*F.*] and Mr. John Belcher, R.A. [*F.*], and published in the JOURNAL for 12th June 1909.

On the motion of the Chairman, a vote of thanks was passed to Messrs. John Hudson [*F.*] and C. E. Hutchinson [*A.*] for their services as Hon. Auditors, and Messrs. John Hudson [*F.*] and W. H. Burt [*A.*] were nominated Hon. Auditors for the ensuing year.

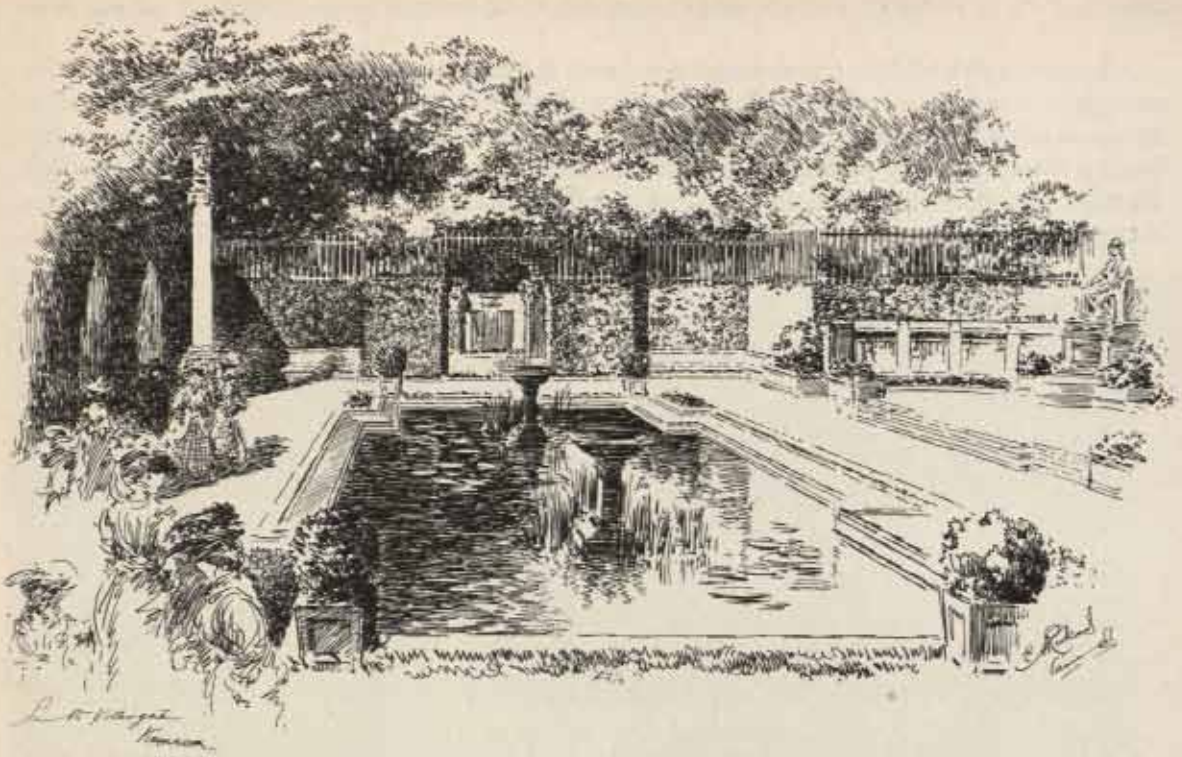
A vote of thanks was also passed to the Statutory Board of Examiners for their services during the past year.

The proceedings closed and the Meeting separated at 9.45 p.m.

It is with deep sorrow that we have to record the death of His Most Gracious Majesty King Edward VII., which took place on Friday, 6th May 1910.

His Majesty was Patron of the Royal Institute of British Architects, first as Prince of Wales and then as King, from the year 1866 until his death, and during his reign he conferred annually the Royal Gold Medal for the promotion of Architecture on the recommendation of the Institute.

The Royal Institute mourns not only, in common with the Empire, the loss of a great Sovereign, but also the loss of a gracious Patron both of the Institute and of the art of Architecture.



THE ART OF THE MONUMENT.

By E. A. Rickards [*F.*].

Read before the Royal Institute of British Architects, Monday, 23rd May 1910.

MY one doubt in accepting your invitation to prepare a paper on this subject was that I felt sure that you anticipated a retrospect of the many acknowledged masterpieces in a branch of art which embodies so much of architectural form in combination with the more literal presentment of the figure, both conventional and realistic. I feared that I should be expected to prepare some analysis of these various examples and point out what I consider the lessons to be derived from them, which might amount to something like rules, for guidance in composing modern works of art to serve the same purpose.

Now, to compile this would bore me extremely, and would weary you more in my presentment of it; I should be covering ground which has been trodden wearisomely level. It often seems to me that everything in this form of art has been so ascribed, tabulated, and even re-embodied that in most cases the freshness of appeal has evaporated. It is really only by the imagination exercised in conceiving the new that one can make the full circle and arrive at the due appreciation of the work of the masters of a former age.

In my title, "The Art of the Monument," the word "monument" stands for any sort of erection of a purely ornamental, commemorative, or even abstract purpose, as distinct from that of a utilitarian nature, such as a building, or portion of a building, not in the first place necessary to life, manufacture, or convenience of any sort. In short, one is the art of embodying a definite and material purpose; the other, that of expressing and imparting an idea.

In most cases of the latter sort some presentment of the human figure is included, and it is the relation which the human element, with its association of a practical and tangible world, bears to the abstract, whether heroic, artistic, philosophic, &c., with which the artist is concerned in works of this class.

I have explained that I do not intend to trace the evolution of this art, or to catalogue the successful examples. I will only say that it is this blend of the living idea with that of the serene or spiritual atmosphere which has given them their continued attraction for us, and the quality of immutability peculiar only to the greatest works of art from the very earliest period. Watteau and his school had this idea of a half-way world in their poetic fancies, the *fêtes champêtres*, with the statuary half hidden in the boskage peeping into the world of fact, where

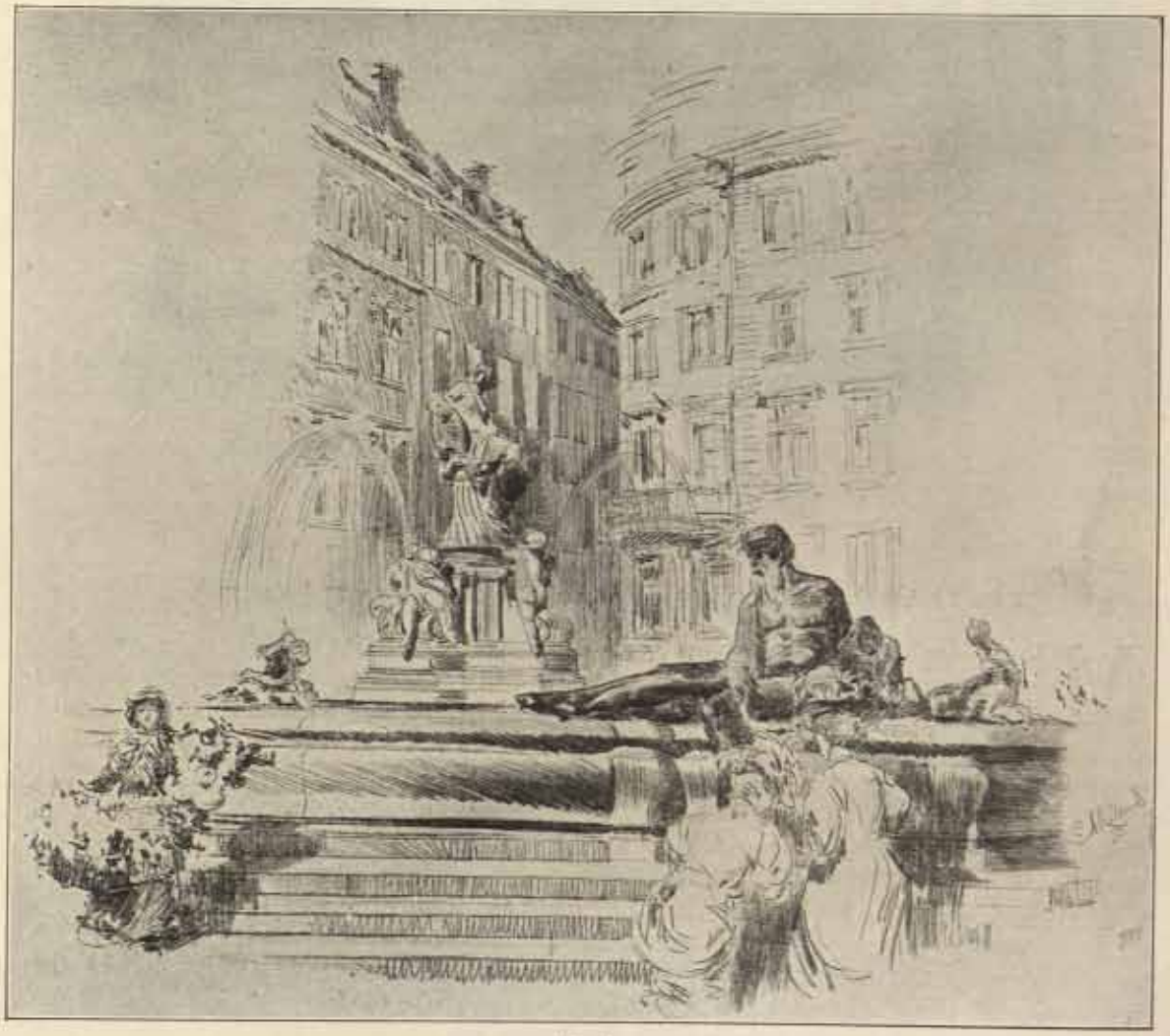


FIG. 1.

the ladies and gentlemen of the Court appear quite ready to welcome them, masquerading as characters of the Italian Comedy, or in some other disguise of their material selves.

Even in the real life of to-day this quaint juxtaposition, in spite of the sharper contrast between the costume of the living and that of the sculptured figure, or the lack of it in the latter case, may produce the most delightful groupings and recall one to this idea. As an instance, the beautiful fountain by Donner in Vienna, of which I made a sketch during the Architectural Congress there [fig. 1], particularly appealed to me in its relation to the modern fashionable world of the city.

This suggestion of intimacy between the living and the sculptured figure has been most delightfully expressed in the work of some modern painters. They above everyone can help us to realise the more elastic and playful side to such work, since they delight in the accident of effect and are always seeking it. With all the severity of architectonic laws, this will always be present to those who are in wait for it. The French have ever been conscious of this, and their painters' work has kept them continually alive to it from the period of Watteau, to which I have alluded, down to the present day; and amongst the latter-day exponents of this art of make-



FIG. 2.

believe, I should like to remind you of the work of Gaston la Touche. In the new Paris Salon of this year he has three large decorations in one of which is shown the painter at his easel in an old-world garden, in another a sculptor fashioning a vase and figure in marble in the same neighbourhood, and in a third the poet is being ferried over the canal of this pleasure-world; and in each case the artist is accompanied by figures which appear to be the fairy denizens of the park and the animated forms of the statuary itself. The workings of his imagination seem to have stirred this restful haunt and wakened into life the slumbering fancies which must have been active in the minds of those who originally created it. I would also mention the work of an Englishman who is continually recalling us to this point of view, I believe with infinite suggestion to those of us who are interested in securing some element of freedom in the smaller monument.

In a brilliant series of fantasies, among the first of which he produced "The Fountain," which is now in the Tate Gallery, Mr. Charles Sims has played upon this theme. In this picture we see the figures decorating a Baroque fountain, through the mystery of the spray, as though imbued with life, movement, and colour, and approaching the tangible world, from which they are only separated by the process of creation in the mind and hands of the artist of their inception. No better plea for the semi-realistic treatment of the smaller subject in the matter of a monument could be advanced than this picture and the others of a similar character Mr. Sims has produced; and I for one, since my acquaintance with them, have taken something of a more lenient view with regard to realism in sculpture which serves also as a decoration.

In the small gardens of Paris which occur so frequently in some of the busiest neighbourhoods the same note is struck, and, through a slight veil of leafage, the sculpture, scarcely more than life-size, produces the effect of a fanciful world sufficiently near the human to be approached mentally as easily as, with a slight physical effort, one crosses the street. Again, in the streets of modern Vienna, I can remember the almost telepathic appeal of many a delightful creation set slightly apart, perhaps in a more formal frame of its own, yet so near to the hum of life as to quicken the imagination of those who may be able to spare only a furtive glance in the midst of the hurry of affairs.

I have no wish to trespass on the preserves of those who are now so busy with their theories of Town Planning, but the point I wish to make about the smaller monument is that its intimate nature demands that it should be easy of approach and yet have nothing of the vulgar display of the shop-window. Its subtle appeal should be apprehended above the din of the noisier world; it should speak as one who speaks in a low tone and yet carries to the farthest limits of the theatre. This is the theory which should underlie its placing, and when this is disregarded the resulting effect brings about the ridicule which is always bestowed when it is thus invited. The very quality of such realism as I have attempted to describe, which is so attractive in the smaller monuments, necessitates a small oasis in which we can come to terms with it, and, besides, the *ensemble* of any small composition is neither to be observed in the crowd nor appreciated in the full glare of the open where it is lost in space. The presentment of a philosopher, for example, seated or standing on a lonely base in the centre of a large piazza or open traffic-space is as ridiculous as that of a graceful allegory raised slightly above ground-level in the heart of city traffic. I am not indulging in any personal arraignment in the course of this paper, as I know the artist is so often the victim of those who commission and dictate to him, and has to display his work in any way other than he would desire; but you will allow that there are many instances in London, close at hand, to which I could refer.

I will here quote Mr. Chas. Wm. Robinson, in his book *The Improvement of Towns and Cities*, where he refers to the failure thus achieved in so many instances of the placing and execution of smaller monuments. He says:

"The condition suggests, therefore, the one great requisite to render public sculpture an aid to municipal art, once its high function be grasped. This is fidelity to a noble standard of criticism—not merely the existence of such a standard, but the authority to enforce its ruling, to demand that the means be worthy of the end. We have seen that very little public sculpture is purely decorative. 'Art for art's sake' is not the motto of those who dress our streets with the sculptor's bronze or stone, and because their attention is so distracted by other purposes, educational or commemorative, we have sometimes sad violations of art and taste.

"As clearly, it will not do to leave the matter to the public. If the attention of sculptors and donors be distracted by other considerations than those of art, the people may not be depended upon to think with single purpose of beauty. With similarly scattered interest they welcome to

their streets a 'portrait statuary,' hesitating at no bodily or tailoring peculiarities and sparing no thought for fitness to surroundings, if only a name be thus commemorated, a bit of history recorded, or a lesson taught. And yet all this can be done artistically, enhancing the beauty of the street. But this public sculpture, because it has an educational function, ought to conform with the highest artistic standard of the community, not just with its average. If the people, with undivided attention, were true to their own art ideals in the judgment of sculpture, even yet the noblest results would not be gained were the matter left to them. And, finally, what degree of unity and authority could the popular opinion have? Granted that in most cities the multiplication of public statues has reached a stage at which wholesome discrimination is necessary, would the people agree, offer it, and enforce their views?

"Let us put ourselves at once above that provincialism, which fancies that because a thing is sculpture it is art, and hence worthy of honour; or that because a thing is a gift it must be accepted. Let us picture the beautiful parks and streets which fidelity to preceding steps in town and city building could have secured for us, and, recognising the high function of public sculpture, see how we can turn it to account. How may we make it really decorative, really inspiring?"

The obvious answer is that public monuments should be allotted to positions which have been prepared in advance for such adornments: if not to form an integral part of our buildings, at least to be in the shadow of such of those that have that dignity and breadth which might enhance the more plastic art of sculpture and, in addition, would suggest material for the architectural portions of each monument itself, so that its harmony with immediate surroundings would be secured and a resultant scale of detail, perhaps unconsciously but instinctively, adopted in all its parts. The time is not so far distant, I hope, when those of us who are fortunate in having to carry out work of a large and public character will be allowed some jurisdiction over those things which should really be necessary to the general or dominating composition; but the fact remains that once the building line is crossed this is very rarely allowed us. Yet we are more and more embodying sculpture in our architecture, often as a literal advertisement of the purpose of the building itself, and in some cases the chance of including an almost detached monument or a series of monuments does occur. It would be taken advantage of much more frequently if we, as architects, had not such a cold and aloof attitude towards the art of sculpture. I mean this literally. The great display of this art on so many modern London buildings does not always show a real understanding of how to exploit it. Just as in a façade the design is scarcely or not at all affected if niches remain unadorned, so certain portions and spaces might be allowed for future possibilities in the way of accessory monuments or decorative features—their intention would be obvious, and if unfulfilled, it would be nothing more serious than the effect produced by a partially decorated interior awaiting the further masterpieces of successive ages.

As an example, allow me to show you an illustration of setting a monument within the containing lines of a building I am concerned with at the present time [fig. 3]. The base to the foundation is made of a continuation of the details of the base to the general building, and the sculpture takes its place with that on the main façade, and will probably be carried out by the same artist.

When the smaller monument which embodies a single figure is placed in such an atmosphere as a large park or garden or expanse, multiplication certainly enhances the value of each individual design, and I cannot help thinking that some standardisation in the matter of the pedestal and accessory foundations (of course, with every variety of detail suitable to each separate case) would result in a great development of this art of exploiting and enhancing the work of the sculptor. The sculptor would then have something of a definite scale to which to attune his creation and though free within limits, would be led, as were the Greeks, to a consistency of

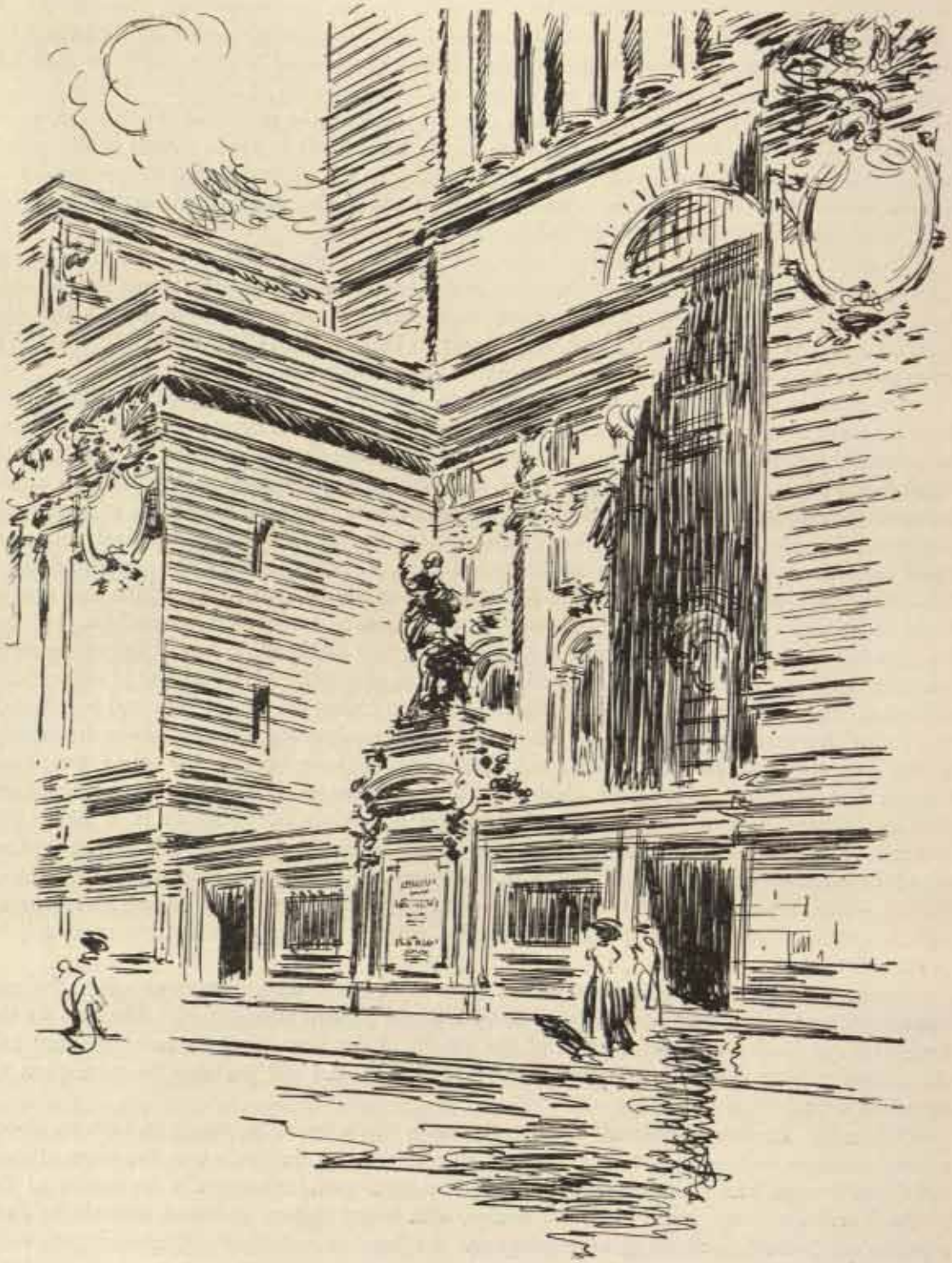


FIG. 3.

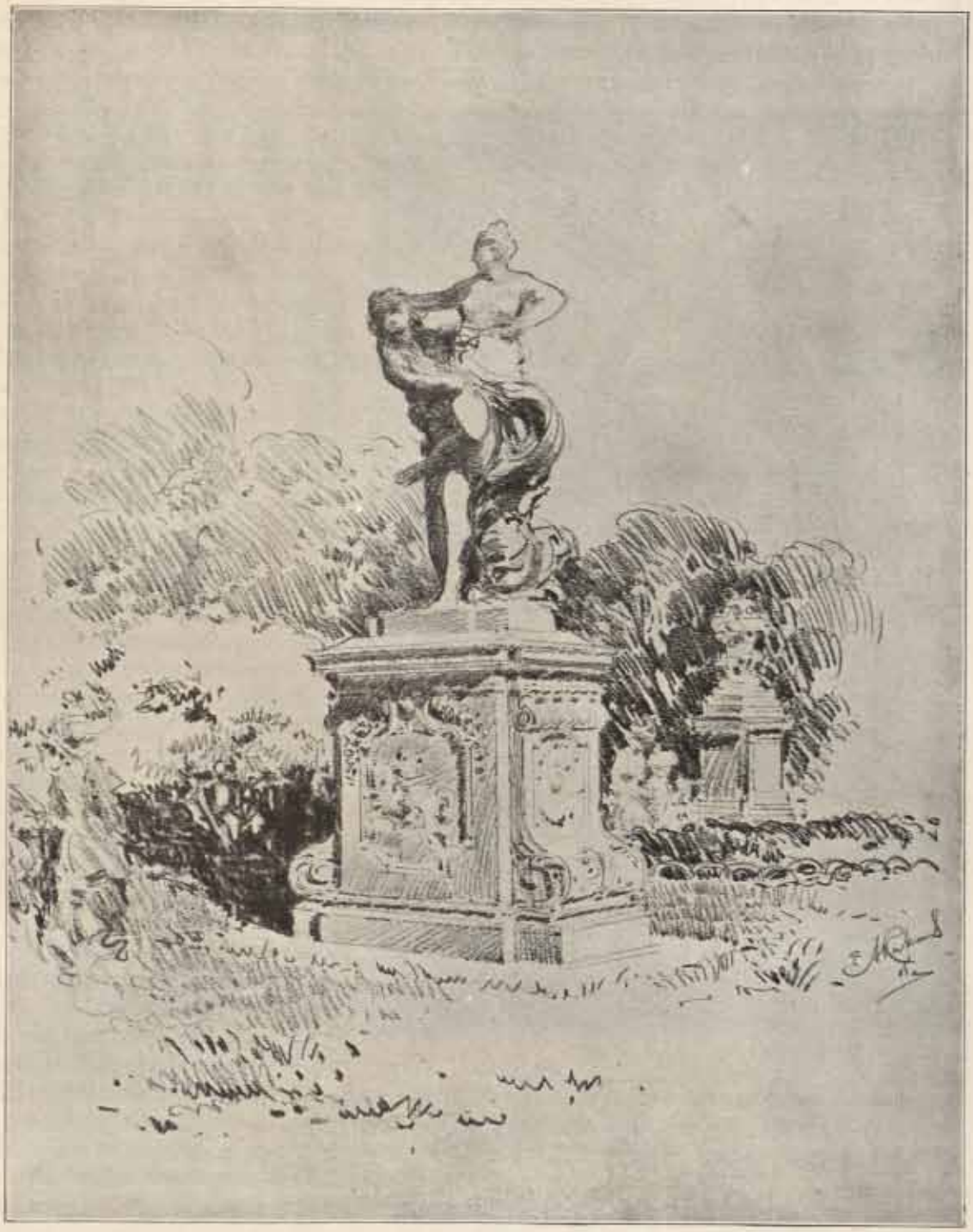


FIG. 4.

treatment of portrait figures which might lead to great perfection in style, or at least to some parallel methods which might be commonly developed.

In the case mentioned, I presume the figure would be usually a foot or so over life-size, and would be seen in each example from much the same angle and distance. Where it would have a standing pose and would be free to be seen from all sides, a pedestal more or less square in form would naturally suggest itself, and the general lines would, I think, find the same proportion and contrasts in relation to the figure.



FIG. 3.

As a practical illustration of this I would remind you of the gardens of the Tuileries, where the sculpture is all much of the same scale as I have just described and is placed on pedestals that vary only slightly in shape. The same thing may be noticed in many of the old gardens, and I could give others, such as the Schwarzenberg Gardens in Vienna, where larger groups of two or more figures occur rhythmically amongst those with single figures, with an added bulk to the pedestal, the same detail and character being maintained [fig. 4].

When I speak of standardising a pedestal, I would admit varieties, of course, and variations in each type; but I suggest this as against the absolute freedom of design so generally allowed. There is a scale in these things, as in any other form of decoration or architecture, and the reason we are not always conscious of this is because the right pitch is seldom maintained in any considerable number of examples in any comprehensive scheme.

I will now give an example of a single figure and pedestal, consisting of a portrait figure in a quiet pose, which might be the same scale and bulk as a hundred others in a city, or portion of a city, such as a park or symmetrically arranged neighbourhood where such adornments might occur [fig. 5]. This shows a pedestal simple in effect which, in the nature of scale and detail, might be designed in harmony with the accessories of adjacent buildings. Presuming this to be placed in a position such as I have hinted at in my preceding remarks, it would be seen in fairly close proximity and from all sides. This raises a point of difficulty with the usual square pedestal: the greater width on the diagonal, which gives the

pedestal quite a different proportion against the same bulk of figure—thus presenting the figure in proper proportion with its pedestal from only certain points of view.

You will see by my next illustration [fig. 6] that this may be overcome without departing materially from the general square lines of the design. In fact, I think it has with it certain advantages in blending the cylindrical form of the single figure with the square lines at the lowest part of the base. The dotted lines show the bulk which a square pedestal would entail, of the same width which this presents from the front view. Yet the reduction in the width on the diagonal is as much as is shown at the point marked A. The result would be a pedestal with all the strong vertical lines of a square pedestal, and from every point of view the bulk shows the same proportion to the figure above. I have not exhibited this idea as the last word in design of a monument of this type, but simply as an example of reasoning out an *ensemble*. It must have occurred to many of you how very often the silhouette of a monument of a single figure is unsatisfactory from some points of view, and probably it was the distortion caused by the variation between the proportions of the figure and the pedestal as seen from different angles. When one remembers that a figure, and especially a figure in costume, is roughly cylindrical in form, it is surprising that circular forms have not more often been adopted in the designing of pedestals and this difficulty avoided. It must be remembered that a pedestal is there to resolve the freer and vertical lines of the figure into the general horizontal plane of the ground and also to bring it into harmony with the lateral atmosphere of the adjacent parts of buildings, and some strong cornice-lines are necessary to do

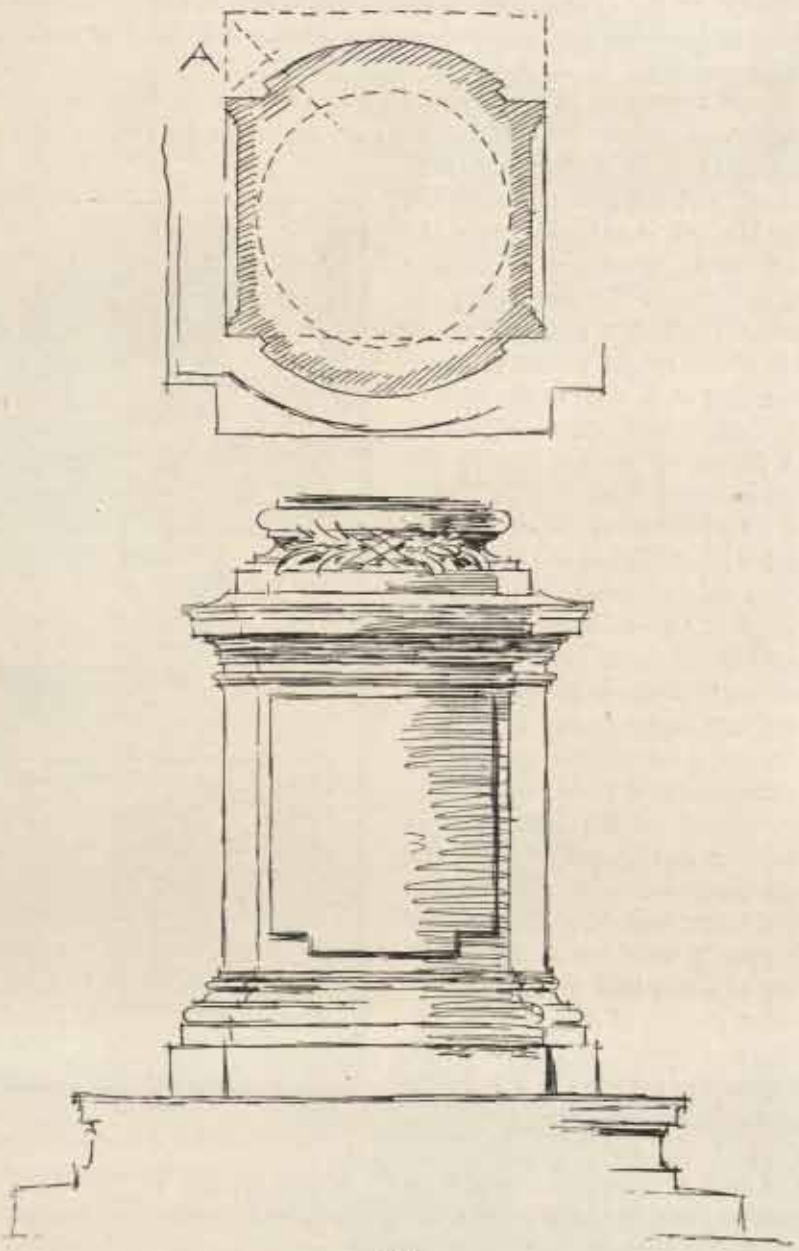


FIG. 6.

this. The bolder these cornices are, the less they can be broken up; so the plan, in a small monument, must be kept extremely simple, and small chamfers and qualifications of the general form avoided. This need not prevent the mouldings and surfaces being enriched to any extent as the occasion offers; in fact, many a design would gain in effect and dignity, and even in apparent size, if the sculptor's art were spread over the whole rather than, as in so many cases it is, suspended at a certain level. In short, rather than advocate more conventionality of treatment of the figure, I would appeal for as much plasticity and variety of detail as possible in the treatment of its setting. Perhaps the extreme instance of this is the Perseus of Cellini at Florence, where the pedestal is so elaborately conceived, and the prostrate figure of the Medusa is extended over the edge so as to obtain a dividing mass between the figure and the pedestal which a strong cornice-line at this height would produce. Standing as it does in the arch of the Loggia, and contained within its frame of exceedingly simple architectural form, it is by reason of its elaboration beautifully in scale with the life of the street, and I can only presume it needs the genius of Alfred Gilbert to emulate this type of work. Its delicacy and exclusive position place it in its own atmosphere, and it is independent of surroundings, much as a monument of any free design might be, placed in the interior of a building, if sufficiently delicate and artistically wrought. There is no doubt that this delightful freedom is equally welcome in such a setting as I can best instance in the water garden of the Boboli Gardens at Florence [fig. 7]. Here the statuary is far removed from the severe forms and strong horizontal lines of the Palace architecture, and just as these are reflected in a softened manner by the formal clipped hedges and enclosing curved lines of the garden and basin, so the monuments themselves are treated in this freer manner of substituting entirely plastic forms for their architectural portions. It is comedy, but beautifully constructed as any other instance of architectural drama might be.



FIG. 7.

I feel I ought not to leave the subject of the smaller monument without some reference to those placed in interiors, but time prevents me from going very far into this branch of our subject on the present occasion. In so many cases this takes the form of a tomb, and whilst in Florence a few days ago I was particularly interested in those executed by Mina da Fiesole, and the very horizontal design embodied in nearly each example. The sepulchral monument, as a suggestion

of rest and tranquillity, can have no better quality than this lateral feeling. It is as though the human element had at last resolved itself into the earth from which it had sprung and all trace of the vertical or active spirit had departed.

In these beautiful examples at Florence the recumbent effigy is reduced to the flattest dimensions. In those cases where the body is supported by a pallet bed, this is undercut, so that, looking up at an angle, one sees still the thin edge as one does in the true elevation of the tomb, and this quality is preserved through the entire monument.



FIG. 8.

The gentle art of Mina da Fiesole has gone as far as that of more virile artists in expressing the repose of the spirit, and the sepulchral monument has this mission before anything. Other monuments are erected to the life and work of the individual, but this should embody the idea of immutability and rest. My illustration here [fig. 8] is a suggestion for obtaining a little of the effect aimed at by such artists as Mina, by reducing to some extent the strong supporting lines of the tomb and by overhanging the body, or support immediately beneath the body, thus bringing it into harmony with the lower decided horizontal lines, which in their turn resolve the whole composition into the general plane of the ground. But with these few notes I will leave the subject of the smaller monument intended for internal exhibition.

Let us now pass on to the next scale of memorial, which would include an effigy of the person commemorated. When the monument is of any considerable size and includes several figures, symbolical and otherwise, it becomes a question whether the portrait figure should surmount the whole composition. I have suggested that the architectural details of the containing and supporting parts of this should bear some relation to the neighbouring architecture which dominates it; but this should be, like the sculpture itself, somewhat more delicate if more free in treatment than that which has to be merged into a larger mass of design and to be definitely linked to the continuous rhythm of a façade. This delicacy of treatment, or rather, the smaller scale of its features, would allow of far more plasticity in blending the sculpture with the architectural lines; and it should be borne in mind that it is to be more intimately approached



FIG. 9.

than the decorative features of a building of any size, if the literal message to be conveyed is to be apprehended.

With all this nearness of approach, the monument has still to be of very small proportions if the portrait figure is to be sufficient to dominate the whole structure. Even with any accessories which it is possible to group with it, it is difficult to compose a mass of adequate weight to do this unless the scale is increased to proportions too coarse to be considered. It seems to me that more legitimate means might be found to surmount the monument, perhaps by a graceful form of some allegory or purely decorative feature, and the portrait figure introduced rather as a salient feature, within the range of intimate approach, but not necessarily to be seen and recognised from any distant point of view. Certainly the sculptor's delicacy of treatment in the case of a presentment of a distinct personality would be more appreciated than if silhouetted, as it would be in the former case, sometimes unavoidably against the light, and great opportunity is introduced by the more abstract form which might be employed in its place. The difficulty of designing a monument of sufficiently commanding proportions and yet keeping the sculpture within the necessary limits of legitimate treatment might thus be solved.

With regard to monuments including an equestrian figure, the added bulk of the horse and figure, of course, dominates more successfully any considerable size in the remainder of the design, and a very successful *ensemble* is possible by means of these forms, as many beautiful examples attest. Still, I should like to see an attempt on the lines I have just suggested for the placing of the portrait figure. A most original and beautiful composition, I am sure, could be arrived at in this way provided that an artist or artists of the right understanding were employed. Indeed, I have gone sufficiently far with my subject to prove to myself at least that one example of an effort beautifully conceived and carried out is worth all the theory which can be brought to bear on it, and the best way of advancing an idea of this sort would be to illustrate it graphically by producing a design on the lines of my suggestion; but I am not provided with one this evening.

Like any other branch of design, it is the experiment which keeps this art of the monument alive, and we are far too content (I speak for this country alone) to continue on the lines of established precedent, very often without a real understanding of the subtle qualities of the examples emulated. Take as an instance the famous Colleoni statue at Venice, which has been the type affected by so many modern creations. In the original the horse is placed so that it appears to be walking right off the pedestal, and this effect is accentuated by the very strongly emphasised vertical lines formed by the columns and decorations which are worked into it. The resulting effect is no loss of balance in the design, but rather that of extreme vitality and force in the sculpture, especially when it is viewed from the front with the horse coming towards the spectator. Yet I have in my mind an example within the reach of us all where this effect of vitality is qualified by the horse being raised on a crude sloping mound of a base, merging the whole composition into a pyramidal form which has no relation to the plane of the ground in its crudity and lack of any horizontal forms, nor any insistence of a division between the conventional support and the sculpture above. Yet this crude *ensemble* of a monument is placed in one of the few formal vistas of our most fashionable town garden. I am not suggesting the Colleoni as a precedent in this case. The site itself and the pose and character of the sculpture constitute an entirely different case of treatment. But the art of the monument has been too little studied, and there seems to be no school of this design or no jurisdiction over such instances of the placing of works of art outside Paris and Vienna. Architects are introducing sculpture into architecture to an extent which bids fair to become vulgar, but in the case of the public monument, architecture—by which I mean the principles I am speaking for—has but a modest record.

We are always hearing that the sculptor must be educated in the principles of architecture, so



FIG. 10

that he may be able to introduce this into the works entrusted to him; but I advance most seriously that it is far more important that we architects should train ourselves more to the appreciation and therefore the knowledge of how to embody sculpture in our own conceptions; we should then be justified in claiming to be more concerned in the erection and design of such works as I am treating of. In the case of two elements so distinct in character as architecture and sculpture being employed in a design, it stands to reason that one or the other must predominate or no balance of effect is anyhow possible. One element may be as capable of plastic treatment as the other, and each may be qualified and reacted upon by its relation to its fellow, but no true marriage or equilibrium can result unless one be paramount.

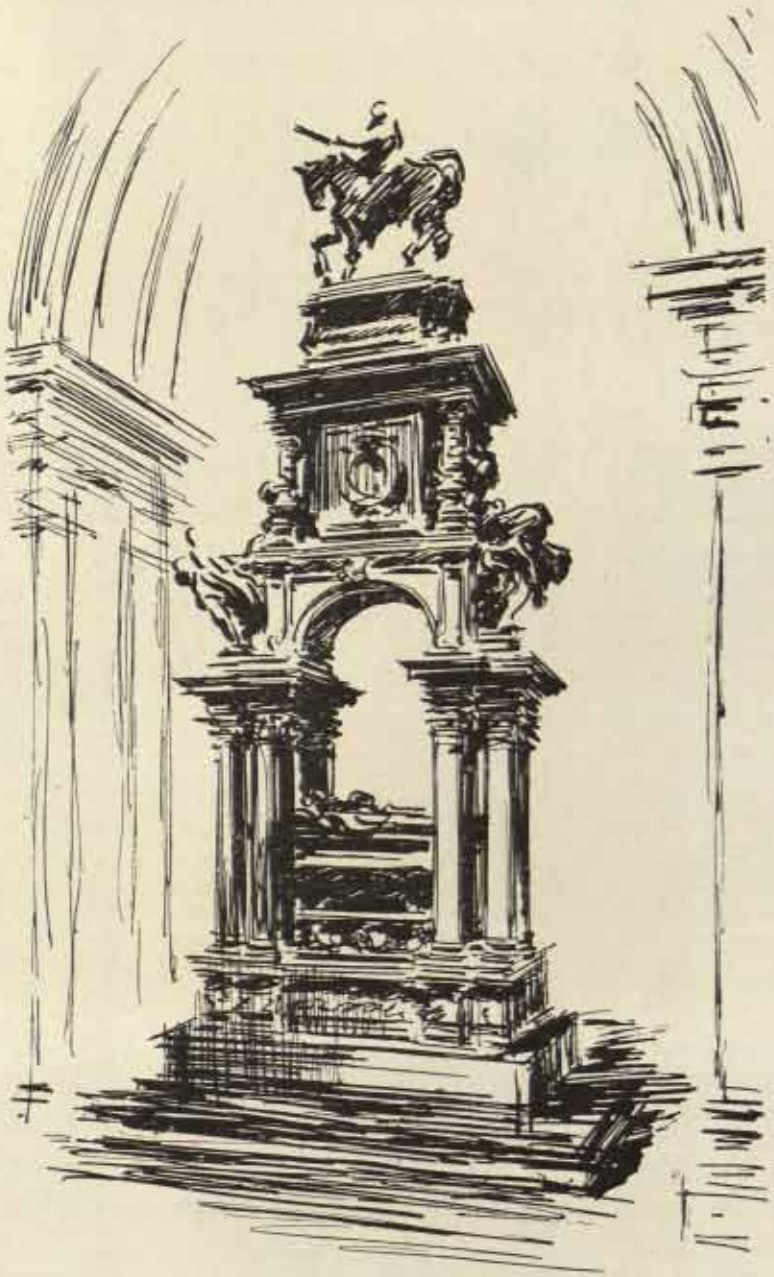


FIG. 11.

In considering this art of the monument, we therefore arrive at a stage where its size and importance necessitate that the one element should take up its due relation with regard to the whole composition and by its very reserve and dignity of appeal reach further than in a vulgar attempt to shout down its fellow. Masculine and feminine have never approximated with any success. Many a beautiful conception has been ruined by the conflict of these two forces, and, to illustrate graphically what I mean by this, let me call your attention to a very well-known example which I am afraid has been very little studied, but rather taken and accepted as above criticism, when criticism, or, I should perhaps say, analysis of its beauties would have taught us how in this case these two elements have been at war.

This illustration [fig. 11] is a sketch not from the finished work (that I will show you pre-

sently), but from the model originally made by Stevens for the Wellington Memorial in St. Paul's. It is well known to us all in the South Kensington Museum, yet I fear that few of us could tell the main points of difference between the complete work and this very beautifully balanced design. There can be no questioning the fact that in the sketch the sculpture is the dominating factor—the architecture is reduced to the merest support for the display of the figures. Its reticence is remarkable: although it is delicately elaborate and in all harmony with the more plastic forms it seems to tie together (witness the resolution of the side figures into the horizontal lines of the cornice to the grouped columns around the sarcophagus), there is no architectural form which asserts itself in competition with the sculptured portions of the monument. It frankly asserts its position as furniture of a large interior where these forms can be employed on an adequate scale, and attempts no display of imitation beyond the fine, simply treated, and more delicate mouldings which are necessary to secure the balance of the parts and bring the whole design gracefully to the horizontal rest at its base. There is a resiliency and play of design which almost amounts to movement. In a word, there is life in the whole structure, from the horse and figure at the summit to the varying perspective of the grouped columns which screen the beautiful and free lines of the sarcophagus and recumbent figure of the duke. I think I describe it in giving it the quality of furniture, and though it is of considerable dimensions one must remember the size of the interior for which it was intended.



FIG. 12.

How much of this quality has been lost in execution it is easy to see by comparison [fig. 12]. The introduction of the arbitrary forms of the curved pediment to the arch, the little pediments under the side figures which destroy the beautiful resolution of the swirl of the sculpture into the cornice line beneath, and a general feeling of tightness which is augmented by the harshness of

contrast between materials, all go to support my argument that here was a case in which the sculpture was the predominating of the two elements and the insistence of the architectural forms uncalled for. I am very glad to have the opportunity of calling attention to those differences between a brilliant conception and the comparative failure of the executed work, but with all respect to the genius of Stevens; my admiration for him is not tempered in any way by the fact that I appreciate his sketch before his finished work. It must be at least as great as those who accept him unreservedly in the completed monument, for I have been interested enough to make the comparison.

To pass on to a scale of monument in which the sculpture to predominate would pass all bounds of due relation to the life and surroundings in the midst of which the memorial might be set. The only way, it seems to me, in which it could be conceived satisfactorily would be as a unit

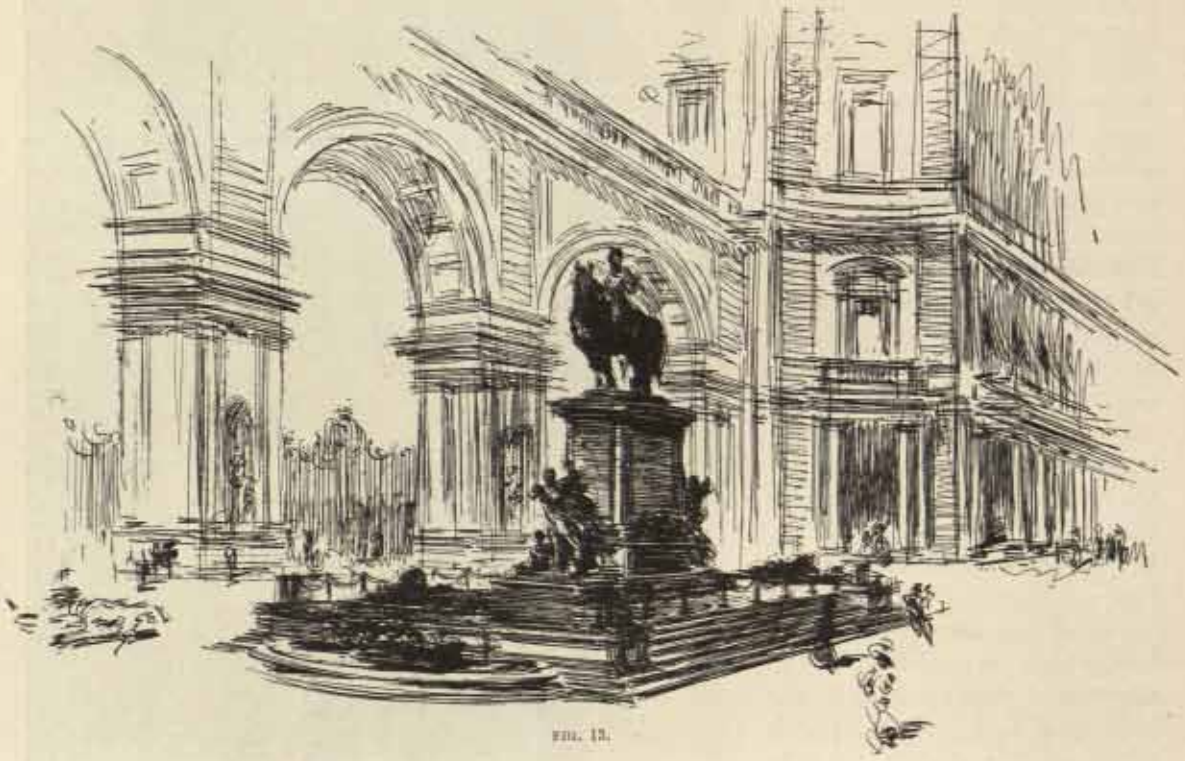


FIG. 13.

of the whole, either as the focal point of interest in a scheme of abstract or architectural forms of design, or repeated as points of emphasis and subordinate to the general composition. I can think of no more effective illustration of the former idea than the memorial to the Empress Elisabeth at Vienna which occupies a corner of the Volksgarten adjoining the Hofburg Theatre [*see headpiece*, p. 559]. This is composed by an enclosure of formal hedge and trellis-work, with occasional more solid features inset, surrounding a basin and fountains of square form the design of which enhances the general placidity and restfulness so appropriate to the scene. At the end of this retreat, on a slight eminence, as though it were a shrine, is placed the portrait statue, and this figure, though only a little above life-size, is the culminating interest of the memorial, which is so arranged as to lead one gradually to the intimacy of a close inspection of the features of the Empress.

The details of this work are very modern and original, but, however one may be prejudiced in this respect, there can be no questioning the general principles of the design of the memorial as



FIG. 14.

a whole, and the reflection of a gentle and feminine spirit is the impression most successfully conveyed. The enclosing hedge, of course, makes the memorial independent of the scale and character of any surroundings; but in the case of one placed in an open square under the shadow of buildings of a certain scale and in close relation to the life and human interest of a city, a repetition of interest spread over the whole monument, or rather, what I might call a composite design, might solve the question of scale and relation to the neighbourhood of its setting. In this illustration [fig. 13], which is quite imaginary, I have shown an equestrian figure of little more than the scale which would be fitting if this constituted the whole memorial, but, in combination with the accessory figures at its base and the fountains and other details which complete the group, the whole monument would amount to a general mass of sufficient proportions. The units of this composition are all within the range of close inspection which their scale necessitates, and the dignity and scale of the surrounding architecture is left undisturbed by any undue competition with their salient and decorative features.

In compositions of any greater proportion than this last example, sculpture, figuratively speaking, should be at the feet of a master element as its limits of possible scale and treatment are defined, but also I believe that any purely decorative composition, such as we have so far discussed, cannot very greatly exceed in size the dimensions suggested in my illustration, unless it serve some semi-utilitarian purpose, such as a triumphal arch, gateway, or water approach or similar architectural composition. I have endeavoured to show the reasons which define the limits of proportion in sculpture, such as its relation to life and the accessories of buildings within its range, and I think that the same rules might apply to the architectural or abstract forms which in their turn have their vassalage to perform.

It follows therefore that any isolated structure of this nature, however beautifully carried out and composed in itself, is doomed to failure, and even to an appearance of the ridiculous, if it be on a scale to compete with the sovereign element of architecture itself; for it is understood that the effect of our buildings is not due to mere vulgar bulk of masonry, but rather to their other qualities of proportion and fitness of material and design. These are not to be threatened if the general friendly relations are to be maintained. The small state is to be repressed unless the suzerainty be augmented in power.

I have one more sketch [fig. 14] in illustration of the theory of complete subordination of a monument to an architectural mass. It will be seen that this constitutes almost a return to the monument of a smaller scale than that which is of the largest possible size to stand alone with dignity, and is, as it were, sheltered by the containing lines of the gateway behind, the whole forming a monument which we will suppose takes its place in a general decorative and utilitarian scheme in the combination of park and city. Thus we pass on to the greatest of all monuments it is possible to conceive in any concrete form—that of the civic building itself, with its possibilities for embodying the work of the artist in every medium; consecrated to the life and interest of the community, and expressing by their assistance the poetry and ideals which should animate and justify its existence. In this house of many mansions room and opportunity for all the different phases of the art of the monument might be found, and under the controlling, or I would say rather the inspiring influence of the original motive, each effort would reflect the spirit and enhance the beauty of this palace of art, and yet be individual—just as each member of the community would depend upon his fellow-workers for his existence, and yet distinction would be within his horizon.

In conclusion, I feel that practically all I have tried to prove in this short paper is that the art of the monument consists chiefly of understanding and expressing its relation to our life in the widest sense as embodied in ideals, purposes, and material effects, and if our future attempts in this art are to have any success when prompted by these considerations, others here may assist in suggesting how this may be best achieved.

DISCUSSION OF MR. RICKARDS' PAPER.

MR. ERNEST GEORGE, A.R.A., *President*, in the Chair.

MR. HOWARD INCE, who rose at the invitation of the President, said he had listened with the greatest interest to Mr. Rickards' Paper. The author had succeeded in expressing in a very suggestive way the ideas he advocated with regard to the Art of the Monument. He had addressed them, as they saw from the charming sketches shown, several of which were his own compositions, not as a mere theorist, but as one who had given particular attention to the subject. The views expressed and the sympathetic reception accorded to them by the meeting should go far to convince their sculptor friends—whom they were so glad to see present—that there is on the part of architects a sincere desire to co-operate for the advancement of the national attainment in this Art of the Monument. It must be remembered that this is the making of History, and however careless the Nation, as a whole, may be now, its future claim to be considered cultured and highly civilised will be determined to no small extent by these records. Success required reciprocal desire on the part of the sculptors, who, he thought, need fear no loss of the esteem in which they are held; they would but follow the example set by their French *confrères*, who have certainly not suffered in reputation from their practice, frankly and openly, to associate an architect with them from the very commencement of the composition of their designs. He (the speaker) believed firmly in the logic of æsthetic analogy; by that he meant that the canons which, admittedly, govern one manifestation of art will not prove misleading when applied to another. No one would consider a picture to be complete, or exhibit it, without a suitable frame; and he thought it equally true that no work of sculpture is complete without a studied setting, whether that were to be an arch of the Loggia di Lanzi or the bosky foliage of the Bobili Gardens. A frame was necessary, and this was one of the points Mr. Rickards had so wisely emphasised. If that were true, it followed that they must be wrong in their custom of almost invariably placing their public monuments on refuges in the midst of traffic. Those refuges were usually the by-products of the surveyor's plan left by the intersection of roads in various directions. They were usually most irregular in form and had no basis of anything like an architectural *motif*, yet they were continually selected for the sites of more or less important public monuments. Most of them would have observed with interest the small monument to Cardinal Newman near the Oratory. It was not a particularly important statue, perhaps, but it was an extremely pleasant composition, and that example might be followed. It had the further advantage that there was no back view, for to his mind the back view of a portrait statue was supremely uninteresting, scarcely of any more interest than the bare canvas at the back of a picture. He also thought that this question of a setting had even a political importance, because in India and such dependencies, where ideas were somewhat different from our own, he had been given to understand that the statue of a Ruler, which was placed in the open with no protection and no canopy, was really to the native mind a subject of ridicule, and gave great delight to the disaffected. He was sorry to say that all about India there were statues of Her late Majesty, Queen Victoria, which stood in the open and had no protection or shelter of any kind. This raised the question of the treatment of a canopy to a public statue. It was one of the most interesting problems for design which could be given for solution, and anyone who had tried it, even in the most elementary way, would look with respect on the Albert Memorial. That was a very extreme example of the use, and the very proper use, of a canopy. At the time the Queen Victoria Memorial was being discussed a very interesting article by Mr. Spielmann appeared on the subject, illustrated by such examples as the Monument to Peter the Great at St. Petersburg, the Maria Theresa Monument in Vienna, and other examples: when one compared these on the same sheet of paper with a presentment of the Albert Memorial it left one with a great deal of respect for the quiet dignity and sense of security which were afforded by the canopy. The others which were without canopies were splendid examples of sculpture, but they were all too freely treated—ladies and gentlemen riding up rocks, and that sort of thing. The canopy was, to his thinking, very necessary for the monument to a king. With regard to what Mr. Rickards said about the placing of a statue in conjunction with a building; looking at the statue of the late Duke of Cambridge—a very excellent statue in its way—it always seemed to him to be placed, for a soldier, in an extremely unstrategic position. He would like to see it transferred to the courtyard of the Admiralty, or that some spaces had been left in the composition of the new War Offices which would be available for that and similar monuments to military heroes. If the powers that be would listen to Mr. Rickards, without any very elaborate buildings and new compositions, plenty of suitable sites could be found. Take, for instance, the screen at Hyde Park Corner, a very beautiful piece of work; he did not think it would lose in effect if on either side of the entrance statues properly proportioned to the screen were placed; two facing inwards and two outwards from the Park, with the screen of columns standing clear

between them and forming a background to each figure. Free statuary might also be placed inside the Park along the Knightsbridge Road. Those were sites available for sculpture without any serious vote on the Estimates in Parliament to enable them to be carried out. He thought it at least open to question whether the portrait statue really makes the most effective appeal to later generations; anyone who sat near the Achilles statue on a fine afternoon must notice the number of people whom it attracted, while the portrait statue, to the same hero, only a hundred yards distant, rarely received notice. As to this last example it should be known that the architect consulted was only allowed to revise the details of a composition already decided in its main lines, and further that, to save expense, his drawings were altered without his permission being asked or given. He could not help regretting that there were not present the Commissioner of Works and other high officials who, at no distant date, would be concerned in the erection of memorials to the late King. They would have received some very valuable suggestions from the Paper. Mr. Rickards, if he might say so, had already had a very noticeable influence on the artists of his own age, both sculptors and painters, and they should all look forward to the time when he would have an opportunity of taking part in the design of some important national memorial. He had the honour to propose a cordial and appreciative vote of thanks to Mr. Rickards for his Paper.

Mr. BERTRAM MACKENNAL, A.R.A., in seconding the vote of thanks, said he was afraid he could not add anything as to what should be the right setting in an architectural sense, but they all seemed to hold by the portrait statue on its pedestal. He could imagine other ways of commemorating the great. The monument of a man should express his life and work, the soul of a man, and not his mere semblance. The latter might be placed in some great building devoted to this purpose. No one passing any portrait statue of a man, as at present erected, felt the greatness of the man. A monument should, if possible, be set in surroundings suitable to the man we wish to honour. We seemed to be going right into the old groove. Mr. Rickards said something about conceiving the new. The whole sentence had escaped him, but he agreed with it entirely. For instance, take the question of a monument to be erected to a great horticulturist. What did it mean, or what value had it, to put a portrait statue of that man in a square, however beautiful? It had nothing to do with the man. To make a true monument to such a man he would like to see a greensward backed by trees in one of our parks. The memorial itself might take the form of a large sculptured urn which should for ever bear some of the blooms he knew and loved. Take another type of man, such as Darwin. How should they make a monument to such a man—his work was so great? The mere idea of Darwin suggests creation itself. Sculptors were bound to architects, but they were not bound on the old lines at all. He wanted every man they honoured to have in his monument something of himself, his work, and his life—not merely his image. He had very much enjoyed Mr. Rickards' Paper, and seconded very warmly the vote of thanks to him.

Mr. H. H. Statham [*F.*] said that in regard to the remark made about the French sculptors and architects always working together on monuments, he was not sure that that was their innate virtue. Public monuments in France were usually Government commissions, and the Government took care that the pedestal should be designed by an architect, and the sculptor could not help himself. He was very much interested by the sketch of the unfinished work of Stevens' Wellington Monument. He saw the points Mr. Rickards had mentioned, but his feeling about both those designs had been that what might be called the upper story of the architectural design was rather too high. It seemed out of proportion to the lower. That was a fault in both the preliminary sketch and the finished monument. Coming to the real point he wished to press about this question of monuments to men and the way to memorialise them, he did not think there was anything more depressing than the sight of those colossal frock-coated bronze figures to be seen from time to time in the octagon room in the Royal Academy, figures in which a costume had to be used, or it was supposed so, which was totally unsuited to sculpture, and which only emphasised the materialisation one wanted to get rid of. What he wished to urge was that the French in many of their monuments had hit upon the right way to do it. They very seldom made a complete portrait statue of a man. They put his portrait bust on the top of a pedestal or column, and they accompanied it by symbolical figures which had some reference to his character, his life, and his work. That was the real way to do it, and got over the great difficulty of the sculpture of modern costume. The old sculpture of the early Victorian period in blankets was absurd, but he maintained that the bronze frock-coats were nearly as absurd. He should like to remind people of the monument that was put up to Regnault the painter. There was a very fine head in bronze and a niche behind it, and a pedestal with a beautiful little boy beneath holding up to him a palm branch. There was nothing materialistic. There was the man's head, which was what one wanted to remember, and there was the suggestion of his work being crowned. With regard to the requirement of placing monuments in some fitting setting, there was a very good example of the danger of neglecting that in the case of a most beautiful sculpture group in Paris, first shown in the Salon three or four years ago.

He could not remember the name of the sculptor, but the monument was to Alfred de Musset, representing his winged genius flying behind him touching him on the shoulder, telling him to take up his lute. It was a very beautiful thing, but they had put it in a little corner of the Rue de Rivoli, almost in the middle of the passage of traffic. Such a position for it was absurd. It ought to have been withdrawn altogether from the material world and put in a separate place where its poetic character would be appreciated. Another suggestion he should like to make on a subject which had been referred to. Mr. Rickards, in defining a monument at the commencement of his Paper, mentioned, among other things, any part of a building which had been erected not merely for utilitarian use. There was an admirable suggestion made in *The Times* a few days ago in an anonymous letter. Of course *The Times* put it in small print and in an out-of-the-way corner, as it was about art. The writer said the best monument to the late King would be to make a new façade to Buckingham Palace. He thought this an admirable suggestion, and he only wished the Institute would take it up. From the first moment that the Victorian Monument was started he had urged that part of the memorial ought to be a façade to Buckingham Palace. The result of the present scheme would be a great sculpture group with a commonplace façade behind it. Now that they were thinking of the possibility of a monument to the late King, he thought this suggestion which had been made in the public Press, but which had not been noticed or taken up, might be kept in mind at the Institute. He warmly supported the vote of thanks for the Paper, which had been illustrated by capital sketches.

MR. RICKARDS, in responding, remarked that he was not disappointed in his audience, in spite of the absence of the Commissioner of Works. He had been rather reminded of an article he had read by Mr. H. G. Wells in the *Daily Mail*, a very pessimistic article, in which he referred to the lack of opportunity given nowadays to anyone who was interested in a particular subject. He said that if a Nelson happened to arrive nowadays he was quite sure he would not be given any position in the Navy, and he did not think a Duke of Wellington would ever have a chance of coming to the front again. If he had had the space no doubt the writer would have gone on to say that no architect of any ability would be employed, and that a sculptor would be quite forgotten in his studio. Mr. Ince suggested competition by saying that if we had collaboration of this sort we must work together from the beginning. The way to insure that would be to have more competition for this form of decoration, so that if a man happened to be capable of designing a work entirely by himself in the way that Stevens did, so far as we know, the work would be judged upon its merits; and if he could produce a sketch equal to that in the South Kensington Museum, and we had a committee of experts to assess this particular competition, and they agreed that this was the right thing to do, and they were capable of agreeing upon it, we should be sure of the right sort of thing. What he was leading up to was this: If a sculptor had not sufficient faith in his own architectural ability he could secure the right sort of collaboration, and if that happened to produce a better thing than anything else sent in, we should hope it would win the competition. Another point Mr. Ince spoke of was the lack of a canopy. It was interesting to remark how such a primitive Oriental idea as a canopy over a figure, suggestive of majesty, should at the present sophisticated period have been forgotten, as we have forgotten so much else. Mr. MacKennal spoke of the portrait statue, and said it did not seem to exist, but he (Mr. Rickards) thought the portrait statue of very great interest. He did not quite agree with Mr. Statham, because he was under the shadow of the Comédie Française in Paris the other day and came across the statue of De Musset. It was not architecturally well placed, and it was not a very architectural feature, but it was not quite left alone in the traffic. It was in the shadow of the building, and it reminded one of the works of De Musset so closely associated with the theatre itself. He wished that De Musset had been accompanied by a few others. He had thought of mentioning that statue in his paper as something which suggested a placing, though not entirely satisfactory. Mr. Statham might also take some comfort in the fact that frock-coats were now completely out of fashion, and fashionable sculptors would be unlikely to make very much more use of them. [MR. STATHAM: There is one in the Academy now, I think.] Anyone who remembered the Gambetta Monument in Paris would agree that the portrait figure with a frock-coat flying in the wind had been very successfully treated. It showed how a clever sculptor would overcome a difficulty of that sort. In fact, as time passed dress began to have a character; even the most hideous came to possess a charm of its own, and it was worth while employing it. Costumes, of whatever period, were all parts of the expression of the sculptor's art, and he did not think a sculptor who had been working in the frock-coat period could afford to ignore it. He thanked the meeting for the appreciative way in which they had listened to his Paper. He wished he could have done a little better with the subject, but it would take a great deal more time. Perhaps if some of them had more opportunities in England of carrying out these examples, they might do a great deal more than merely theorise about them.

9 Conduit Street, London, W., 28*th May* 1910.

CHRONICLE.

His late Majesty King Edward VII.

On Saturday, 7th May, a telegraphic message in the following terms was despatched by the President to His Majesty King George:

"The Council and Members of the Royal Institute of British Architects tender to your Majesty their heartfelt sympathy in the loss sustained by the death of our Royal Patron.—Ernest George, *President.*"

The following acknowledgment was received by telegram from Buckingham Palace:

"The King sincerely thanks the Council and Members of the Royal Institute of British Architects for their kind sympathy.—Equerry."

The premises of the Royal Institute were closed on the 7th May, and also on the 20th, the day of the King's funeral.

A wreath of laurel, arum lilies, and orchids was sent to Windsor Castle, with the following inscription in silver on a black ribbon: "From the Royal Institute of British Architects, In Grateful and Loyal Memory of His late Most Gracious Majesty King Edward VII., Patron of the Royal Institute."

The President, Vice-Presidents, and Hon. Secretary, by invitation of the Dean and Chapter of St. Paul's, attended the Service of Solemn Supplication held in the Cathedral on Friday, the 20th inst., as representatives of the Royal Institute.

The Institute's Address to King George V.

At the General Meeting of the Institute last Monday, before the ordinary business was proceeded with, the President, Mr. Ernest George, A.R.A., made a brief reference to the National loss, and especially to that which the Institute had sustained through the death of its Royal Patron, who had been associated with the Institute since the year 1866. The President then called upon the Secretary to read the Address which, with the approval of the General Body as represented by that Meeting, the Council proposed to submit to His Majesty King George V. The Address was as follows:—

The Humble and Loyal Address of the Royal Institute of British Architects, to His Most Gracious Majesty the King.

May it please your Majesty,—

We, your dutiful subjects, the President and Council, on behalf of the Members of the Royal Institute of British Architects, and of the Societies both in the United Kingdom and in the Dominions beyond the Seas in alliance therewith, beg leave humbly and respectfully to approach your Majesty, and to offer our deep and heartfelt sympathy in the loss your Majesty, the members of the Royal Family, and the Nation have sustained by the death of your Royal Father, our late Most Gracious Sovereign King Edward VII. His late revered Majesty encouraged with his Royal and generous Patronage the art that is so dear to us, and we mourn with deepest sorrow, not only, in common with the rest of the British Empire, our beloved Ruler, but also the gracious and beneficent Patron of the Royal Institute. We most respectfully and dutifully tender to your Majesty our sincere devotion and loyalty on your Accession to the Throne, and earnestly pray that the Almighty will grant your Majesty and your Royal Consort Queen Mary a long, happy, and glorious reign, during which the Nation may prosper, the arts flourish, and your Empire enjoy all the blessings of peace.

The motion for the adoption of the Address having been formally moved from the Chair,—

Mr. Edwin T. Hall [*F.*] said: I feel that in speaking to this motion it is difficult to say anything new, having regard to the fact that during the last fortnight so much has been said in respect to His late Majesty. But we are in an especial position, in that we are mourning the loss of a great Patron whose majesty has been recognised throughout the wide world. There have been emperors and kings, great patrons of the arts, and particularly of our own art, whose demise has been received even by their own peoples with equanimity, and by alien peoples with something less than equanimity, perhaps even with joy. But we have seen the entire world pay homage to our great King, and I think that which differentiates him from all other patrons of the arts is this: he was so great that he did not specialise in the patronage of any one subject, but in the breadth of his sympathies and in the wide range of his interests he appealed to the peoples of the world in a way that is absolutely

unique, because each individual and each community was touched with the warmth of his personality. When we consider the silence which last Friday obtained in every quarter of the globe where public traffic was stopped, we feel that such a silence spoke with a mightier voice than the thunder of cannon or the massed bands of the universe. And we, as a Royal Institute, have a peculiar right and privilege to acclaim the greatness which placed the late King on an Olympian height. We are the corporate children of the Royal Family, and as loyal sons we express the grief we feel at having lost our great head. While feeling this profound sorrow for our loss, we also desire to tender our loyal devotion to His present Majesty King George. Everyone who has come in contact with His Majesty has realised the great qualities which he is bringing to the discharge of his high office. He has ascended the Throne when the horizon of architecture is broadening, and we are looking forward to a day of great things for our art. It is, I feel sure, the prayer of everyone present that His Majesty may be endued with wisdom and strength long to reign over a devoted and happy people among whom the arts shall flourish.

The motion for the adoption of the Address was carried in silence, the whole assembly standing.

The Town Planning Conference.

The Town Planning Conference (July 11-16) and the Annual Dinner of the Institute (July 15) have been postponed till October, owing to the lamented death of His Majesty King Edward VII., the Patron of the Royal Institute.

The late Professor Aitchison, R.A., *Past President.*

George Aitchison, R.A., who died at his residence in Harley Street on Monday, the 16th inst., in his eighty-fifth year, had been a member of the Institute for over forty-eight years, having been elected Fellow in 1862. His connection with the work of the Institute dates back some years earlier, the TRANSACTIONS for 1857–58 containing a Paper, "On Colour as applied to Architecture," which he read at a General Meeting on the 14th December 1857. From the first he took an active part in the Institute's affairs, reading Papers, serving as Examiner in the old Voluntary Architectural Examination and as member of various Committees, including for some years the Chairmanship of the Literature Standing Committee. He was for many years member of Council, was Vice-President from 1889 to 1893, and followed Mr. Penrose in the office of President, which he filled for three years, from 1896 to 1899. It was while serving as President in 1898 that he was presented with the Royal Gold Medal for Architecture. His portrait, one of the most admired in the Institute Collection, was painted by Sir L. Alma-Tadema, R.A., on the commission of members, and presented to the Institute in 1900. His contributions to the Institute TRANSACTIONS and JOURNAL include the following Papers beside that already mentioned: "On Iron as a Building Material" (1863–64); "Progressive Use of Iron in Building" (Conference 1871); "The Late W. Burges, A.R.A." (1883–84); "The Roman Thermæ" (1888–89); "The Late Mr. Pullan" (*ib.*); "Charles Robert Cockerell" (*ib.*); "Byzantine Architecture" (1891–92); "Editions of Vitruvius wanting in the Institute Library" (1894–95); "The Use and Abuse of Marble for Decorative Purposes" (*ib.*); "Lord Leighton's House" (1896–97). Besides his various Addresses as President—each of them a model of erudition, research, and wisdom—Professor Aitchison prepared for publication in the JOURNAL some of his later series of lectures at the Royal Academy, viz. "St. Peter's, Rome" (1900–02); "The Learning of Architecture" (1901–02); "Iron," "Coloured Buildings," "Coloured Terra-cotta," "Marble" (1902–03); "Coloured Glass" (1903–04); "Vitruvius" (1905–06); "Excellence in Architecture" (*ib.*). His contributions to discussions were especially interesting. "He had always something scholarly to say," Sir Wm. Emerson once remarked, "and he always said it in the happiest manner, generally with some touch of humour, some expression of wit or wisdom culled from an old writer or classic work."

At the Institute Meeting last Monday, the Hon. Secretary, Mr. Henry T. Hare, having formally announced the death, said that all must feel that they had lost in Professor Aitchison one of their most distinguished members and a highly gifted architect. His presence in the Presidential Chair of the Institute had been marked by extreme ability in the conduct of its affairs and by the greatest courtesy and geniality. They felt that they had lost in him not only a distinguished member but also a very dear friend. Mr. Hare concluded by moving that the regrets of the Institute be recorded on the Minutes, and that a vote of sympathy and condolence be passed and communicated to the relatives of the late Fellow.—The resolution was formally put and carried in silence.

The following is quoted from the interesting sketch of the late Professor's career which appeared in *The Times* of the 17th inst.:—

> In George Aitchison the profession of Architecture loses a man of great learning and most diverse accomplishments. In them he exemplified the many-sidedness of his profession; and his long life and his early acquaintance with men of distinction made him in a remarkable degree a link with the traditions of the past. He was the son of an architect—his father, George Aitchison, being architect to the St. Katharine's Dock Company, and the designer of the stations on the "London and Birmingham" Railway, in days when the professions of architect and engineer were scarcely separated. Such beginnings may seem unpromising for a man who was so devoted to the artistic side of his calling. Mr. George Aitchison,

senior, was a friend of Donaldson, Cockerell, Wyatt, and Barry; and the two first-named—so greatly distinguished in the study of Classical and especially of Greek architecture—were, in particular, friendly to the son also. Young Aitchison was sent to the Merchant Taylors' School; articled to his father at the age of sixteen. In 1847 he became a student in the Royal Academy Schools, and in 1851 he took a B.A. degree at London University, distinguishing himself in mathematics. In 1853 he started for the Continent, seeing much of France on his way to Italy, where he made a prolonged stay. In Rome he got to know Mason, and was by him introduced to Leighton and the much younger Poynter. Waterhouse and Burges, both students of architecture and afterwards fellow-members of the Royal Academy, also became friends of his. With Burges he made a tour through Central Italy and on into France; then turned back to Italy alone, and finally reached London in 1855.

In 1859 he was takeninto partnership by his father, and on the latter's death in 1861 succeeded him as architect to the St. Katharine's Dock Company, and later on became architect to the united St. Katharine's and London and Victoria Dock Companies. Engineering work, the construction of wharves, and the building of warehouses and offices occupied him for some years; but in 1865 he was, through the instrumentality of Leighton, given the opportunity of devoting himself to the more purely artistic side of his profession. In that year he began Leighton's house in Holland Road, to which the Arab Hall was subsequently added. Quickly on this followed much work in town—for the Princess Louise at Kensington Palace, for Mr. Percy Wyndham, Lord Leconfield, Sir Wilfrid Lawson, Mr. Eustace Smith, M.P., Mr. F. Lehmann, M.P., and others of note. In 1868 he built the board room of the Thames Conservancy, which was decorated with a frieze modelled by Leighton; in 1877 Founders' Hall in the City, and in 1886 the Royal Exchange Assurance Company's offices in Pall Mall. On the death of his friend F. P. Cockerell in the 'eighties he undertook the completion of the house then building in South Audley Street for the late Mr. Stewart Hodgson, the original owner of Leighton's "Daphnephoria," since included in the McCulloch collection; here Walter Crane and other artists co-operated with him in the decoration of the rooms. Later he made additions for Mr. Stewart Hodgson at Lythe Hill, near Haslemere, also originally begun by F. P. Cockerell. Doubtless owing to his early connection with dock work, he was in 1889 employed as consulting architect with regard to the foundations of an extension of the Poplar Union Workhouse, which stands near the West India Docks on very marshy ground.

But before this he was winning distinction in other fields of a nature for which his sound practical experience, his travels, and his vast reading had prepared him. He was in 1881 elected an Associate of the Royal Academy, and lectured on Architecture on several occasions, being finally appointed Professor of Architecture there in 1887, a position which he held for eighteen years. . . . In 1898 honours fell thick upon him, for he was in that year promoted to the full membership of the Royal Academy and also received the Royal Gold Medal for the Promotion of Architecture. He was already a foreign Associate of the Royal Academy of Belgium, and later became foreign member of the Royal Academy of Fine Arts at Stockholm, besides receiving many other honorary distinctions. In addition to giving the lectures on Architecture at the Royal Academy his influence as a teacher was exerted in other directions, for he drew up the syllabus on the Principles of Ornament for the Science and Art Department at South Kensington, and was one of the examiners there. It is characteristic of his varied capacities that he was also for many years District Surveyor for East Wandsworth and Tooting, a large and not yet fully developed district in South London.

In George Aitchison, as has already been said, has disappeared an architect trained in the great traditions of the Greek classical school. As was to be expected of one who in his youth knew Donaldson and Cockerell, his admiration for Greek art was intense and showed itself in the delicate mouldings which he loved to design for his marble, stone, and woodwork details. His sympathies were not merely Classical, however; during his early visit to Italy he executed a series of water-colour drawings of Roman basilicas and other churches, rich in marbles, mosaics, and frescoes, which in the 'fifties received scant attention from architects and painters. Doubtless his tour with Burges, who was nothing if not an enthusiast for mediæval art, influenced him in his knowledge and appreciation of "Gothic" buildings, though there is little trace of the "Gothic revival" in his work, which, on the other hand, and especially on the decorative side, showed in the materials he used—in the marble and the gold mosaic, in the fine wood inlaid with ivory and mother-o'-pearl—the influence of his unorthodox Roman studies. His lectures and occasional papers were wide in their views, and in their range covered the whole field of architectural design, displayed a vast erudition, and were illumined by parallels, examples, and anecdotes drawn from every period and branch of history and literature. Finally, as became a student of Classical architecture and the Classics, his knowledge of Vitruvius and the printed editions of his writings, of which he possessed not a few, was great. He was a friend of many distinguished men, and in conversation his retentive memory supplied him with many apt and amusing illustrations of any subject under discussion. He had, indeed, a rare combination of opposite qualities—of strictly utilitarian knowledge with refined and delicate taste, severely practical experience with vast book-learning—yet he was always open to new ideas in archæology or new methods in present-day construction. He was, in fact, a type that new generations and new conditions are not likely to produce again.

The funeral took place at the City of London Cemetery, Ilford, last Monday, the body being cremated. A service was held at Holy Trinity, Marylebone, by the Rev. E. Grose-Hodge, the rector, and the Rev. J. Messenger, a brother-in-law of Mr. Aitchison. The Royal Institute and the Royal Academy were officially represented. Among members present were the President, Mr. Ernest George, A.R.A., Sir E. J. Poynter, P.R.A. [*H.F.*], Sir L. Alma-Tadema, O.M., R.A. [*H.F.*], Sir Wm. Emerson [*F.*], Sir John Taylor [*F.*], Sir George Frampton, R.A. [*H.A.*], Mr. John Belcher, R.A. [*F.*], Mr. Reginald Blomfield, A.R.A. [*F.*], Mr. Henry T. Hare, *Hon. Secretary*, Mr. Goscombe John, R.A. [*H.A.*], Mr. Alfred Conder [*F.*], Mr. J. D. Crace

[*H.A.*]. A portrait of the Professor appears as a frontispiece to the volume of the JOURNAL for 1898.

George Aitchison, R.A.: a Personal Note.

Some men are best remembered by their accomplished work and the renown which it has brought to them living, or alas! not till later. With others it happens that it is less their professional work, good though it be, which is the main factor in the esteem in which they are held by their fellows, than some quality in the men themselves.

George Aitchison's work and his artistic powers were known and appreciated by his professional brethren and in the art world; but the erection of no great building had focussed attention upon his professional career. It was rather his wide grasp of the subject of Architecture as an art, his well-stored mind, and that large and catholic love of art which held him aloof from controversy. Few men had read more in the older literature of architecture, none perhaps retained in mind so much of what he read, nor have I ever met a man who could, and so readily did pour out information and quotations from his store of reading, often from strange by-paths of literature. His fund of quotation and anecdote seemed inexhaustible. Probably no one could be in his society for ten minutes without experiencing this, which gave a special charm to his conversation, for it was never didactic, but came from him with a genial and kindly *bonhomie* that added to its value. Good talker as he was, it was not as a rhetorician. The words came in a gentle flow, often broken by little hesitations, like the hill-side stream broken by the chance obstructions of rock or bank, and which only made his hearer more keen to listen. Full of humour, too, it was, for the short pause was often the prelude to a kindly witticism—and his wit was as free from bitterness as from personal offence. These are characteristics which should be recorded although their charm cannot be conveyed.

The architect and his teaching will be remembered and held in honour by younger generations; the man, his loveable nature and its influence on all who came in contact with him, can only be known to those who have lost him now. With them his memory will be held dear; for no short space will the remembrance of his smile and voice awaken keen regret; nor is it with feigned lips that they now murmur—"*Vale!*"

J. D. CRACE [*H.A.*].

Mr. Sydney Perks' Paper on the Guildhall.

The Paper on "The Restoration and Recent Discoveries at the Guildhall, London," by Mr. Sydney Perks, F.S.A. [*F.*], will be read before the Royal Society of Arts on the 1st June, having been postponed from the 11th inst. Dr. Philip Norman, F.S.A., will preside. The Paper is to be fully illustrated by lantern slides.

Ashburnham House and the Precincts of Westminster Abbey (*ante*, pp. 193–211).

Dr. Armitage Robinson, Dean of Westminster, kindly gives permission for his interesting letter to Mr. Sirr to be published here:—

"I have read your paper on Ashburnham House with great interest. It contains a good deal that is new to me.

"I hope some day to be able to clear up the myth about the Misericord, and to show that it was a room upstairs, probably at the west end of the Refectory in a gallery, as at Durham. Then the 'Dean's House' will give us the old house of the Prior, which we know was considerable and which no one has hitherto been able to locate. The Elizabethan plan was printed, I think, in Walcott's *Westminster*: it is very puzzling, but perhaps chiefly from its omissions. The photograph showing the 'jutty' is most interesting: this feature I had not known of at all: I should think it might quite well go back to Henry VII or Queen Elizabeth. In your sketch on p. 194 you have by a slip put *Infirmary* for *Dormitory*. The Little Cloisters (p. 211) were built by the Infirmarer in the 14th century; they were remodelled on an Italian pattern, I take it, by Wren: the accounts for both periods exist. I should think that it ought to be possible to find who lived in Ashburnham House (or its predecessor) in the time of the Commonwealth; for the accounts of that time are well kept. As to the rise in rent when the house was let to the Crown, it should perhaps be considered that the low rent at which Lord Ashburnham held of the Dean and Chapter involved the payment probably of a large fine at the various renewals; whereas the Crown had only an annual lease. These few notes will, I hope, show you that the paper is very interesting to me. I hope you will go forward and write about the great school and Dr. Busby's museum, and his house, which I am sure Canon Duckworth would welcome you to see."

Lord Ashburnham mentions that the Ashburnham MSS., to which reference is made on page 204, were a collection formed by his late father, and they were almost exclusively of literary value. It would have been a singular accident, therefore, if they had contained any reference to the history of the family and incidentally to Ashburnham House. Lord Ashburnham adds that, as a matter of fact, the history of the Ashburnham family is unusually poor in records of every kind.

It may be mentioned that the Elizabethan plan reproduced in Mr. Sirr's paper is identified as part of Norden's view of Westminster, 1593, in the notice of the paper in the *Architectural Review* for February 1910 (p. 116).

The School of Architecture, Liverpool.

Professor C. H. Reilly, M.A.Cantab. [*A.*], contributes the following particulars of the Old Blue Coat Hospital, which through the generosity of

Mr. Lever has now become the home of the School of Architecture of the University of Liverpool:—

"The building was erected in the years 1716–1717, and is a good and complete example of Queen Anne architecture; indeed the only one Liverpool possesses. It is situated in a quiet side street called School Lane, but faces the main thoroughfare of Liverpool, Church Street, across the grass of the pro-Cathedral churchyard.

"The architectural interest centres in the buildings surrounding the court, which were the first to be built, and have remained unaltered to this day. These the School now occupies. The main block facing the gateway consists of the dining-room and chapel over it, now the exhibition room and main studio of the School, two large rooms 90 feet by 40 feet, well lit with large windows on either side. The two wings were designed to accommodate twenty-five children each, girls on one side, boys on the other. As in a court of a smaller Cambridge college, three doors lead from the courtyard to either wing, though the dormitory plan above does not admit of separate staircases. Each door is emphasised by a little pedestal of stone steps with a flagged walk leading to it, giving a most picturesque and charming effect.

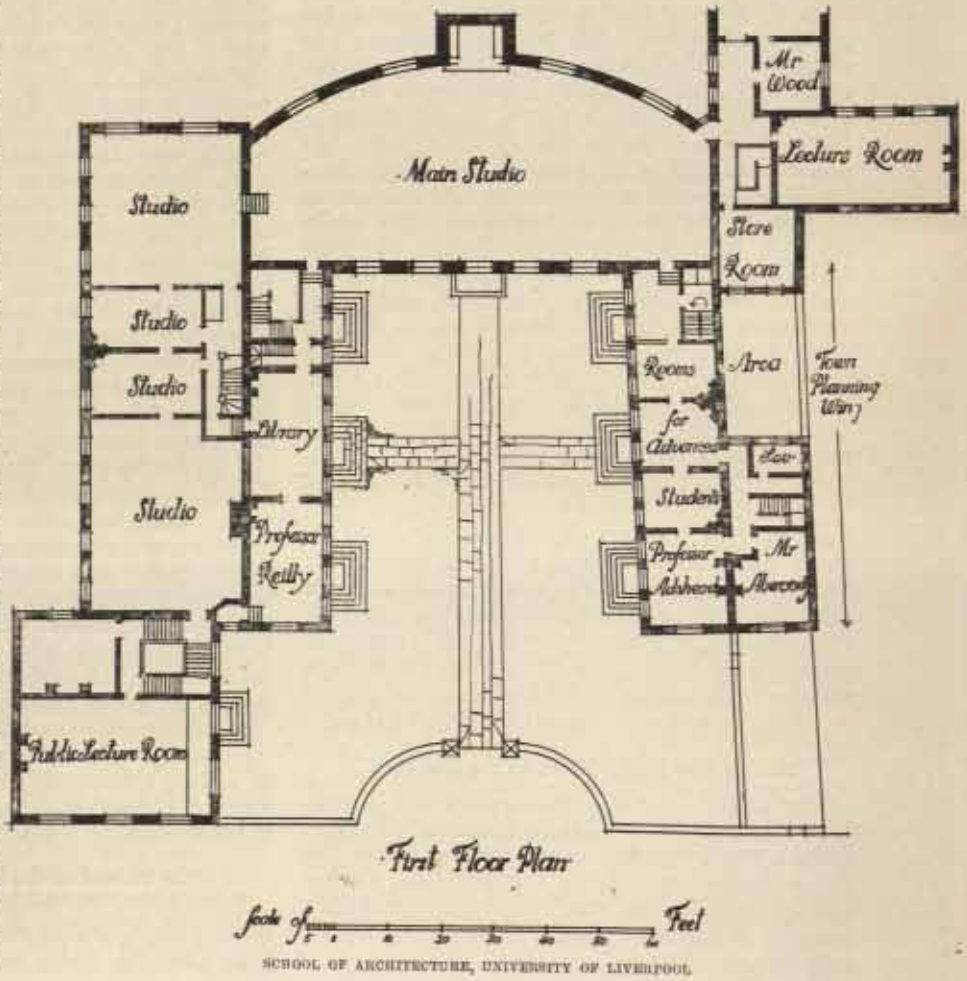
"The windows in the flank walls, which are in excess in glass area of many a modern building and give ample light for studio purposes to the interior, are set well to the face of the brickwork, and by their broad frames and astragal bars carry through the sense of wall surface without any feeling of weakness. Indeed, these side façades offer a very practical solution of the problem of an office building where light is important, for even the rooms with the oval windows are well and pleasantly lit. Externally the frieze of elliptical windows under the cornice, well set in a field of plain brickwork, is a delightful feature.

"The materials are small hand-made red bricks and local sandstone. Liverpool, like the rest of the north of England, suffers from Ruabon red pressed bricks, so that on the score of brickwork alone the building was worth saving. The windows are glazed throughout with blown crown glass.

"I have been unable to ascertain the name of the architect or master builder, but the detail is the traditional detail of the period, with just a hint of Inigo Jones' influence in the main doorway opposite the entrance gates.

"An interesting motto on the chapel frieze, "CHRISTIANAE CHARITATI PROMOVENDAE INOPIQUE PUERITIAE ECCLESIAE ANGLICANAE PRINCIPIIS IMBUENDAE SACRUM ANNO SALUTIS MDCCXVII," explains the original purpose of the building—a motto we mean to keep now that the purpose is changed.

"I find from old accounts the cost of the building in 1717 was only £2,000 to £3,000; the agreed purchase price to-day is £24,000 to £25,000. But in the eighteenth century the accounts also show it was possible to feed, clothe, and educate a boy at the Hospital for £8 12s. a year, while his architectural successor to-day costs £30. That the train-



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ing of the latter, however, will be the better for his new surroundings is not too much to hope for, and at any rate the thanks of architects are due to Mr. Lever, not only for saving so fine a building from the imminent destruction that threatened it, but also for giving it to the service of our profession."

The Auld Brig of Ayr.

In the Engineering Supplement of *The Times* of 11th May particulars were given of the steps which have been taken for the preservation of the famous Auld Brig of Ayr. The bridge consists of four spans, varying from 52 to 53 feet, and is 12 feet wide between parapets. It will be remembered that decay had set in in the stones of the arches, and the foundations had become insecure. The founds of the bridge had originally rested on a cradle of oak beams (12 inches by 8 inches in section) placed on the boulder clay. This boulder clay has now been to a large extent replaced at the surface by fireclay and gravel, but is found again several feet below the cradle. All these oak beams were removed during the work of underpinning. The wood was generally in a good state of preservation. The following account is given of the work of reparation:—

In 1907 a Preservation Committee which had been constituted decided that the work of restoration was too intricate to be entrusted to a contractor, and authorised Mr. W. S. Wilson, of Glasgow, as their engineer to carry out the work by administration. The engineering features to be faced were the strengthening of the superstructure and the underpinning of the piers and abutments. In the first instance, after the necessary excavation of all loose material, a 9-inch layer of concrete was laid over the top of each arch, concrete cross walls were built at each pier, the foundations for these walls being taken down to the solid masonry, and the spandril walls were strengthened by grouting with pure cement under an air pressure of between 20 and 30 lb. per square inch. New concrete spandril walls were built midway between the existing walls. This completed the first stage of the work, which presented no difficulties, although the progress was slow, because the surface of the spandrils had to be pointed on the outside before grouting, and the interstices between the arch stones had to be scraped out and filled with cement before the 9-inch layer of concrete could be put down. So rough were these arch stones that it is surprising the bridge stood for so many years. The northern arch was rebuilt about two hundred years ago and was in a fairly good state of preservation, although it was deemed wiser to treat it similarly to the other three arches.

When the superstructure was finished the more dangerous and complicated work was begun of securing the foundations by underpinning them with blue brick built with cement. The three piers and the two abutments were underpinned. The flow of the River Ayr is greatest under the southernmost arch, and the bed of the river at the south pier was scoured out to a depth of 8 feet below the old foundations. Soundings were taken at this point, and concrete (in bags) was deposited to fill up the existing holes and to prevent any further scour. The concrete was laid level (at a depth of 1 foot below low-water mark) under the bridge to a point in a line with the western limits of the cut-waters, and thence was carried at a slope of 4 to 1 for a distance of 30 feet down stream.

A shaft was sunk down the centre of each pier and behind the abutments, the water being kept out as much as possible by grouting the surrounding masonry with pure cement. These shafts were carried down 9 feet below the original foundations into hard boulder clay, and from the shafts mines were driven until the outsides of the founds were reached. These mines were securely timbered as they advanced, and cement grout was forced up through the temporary timber roof into the old foundations. As this grout hardened, and when the timber was withdrawn, it afforded a smooth surface which was necessary to make a satisfactory roof for the brickwork underbuilding. During most of the time that the excavation of the various mines or sections was in progress a 4-inch centrifugal pump, driven by an 8-horse-power electric motor, was kept at work to deal with the inflow of water. This pump had a capacity of 375 gallons a minute, but even at full speed had considerable difficulty in keeping the water under control. When the mines were nearing the outside of the piers, where the fireclay above the boulder clay had been practically washed away by the river and replaced by gravel and stones, the water at high tide often drove the miners to the surface. This occurred particularly at the southernmost and northernmost piers, where the scour of the river was worst.

The sections, 6 feet by 4 feet, were excavated individually, and each one built up before the next was started. When each section had been made waterproof a layer of concrete was laid on the boulder clay, and the brickwork was then built in. The timber was withdrawn as the building advanced. In this brickwork 2-inch pipes were left, and the last row of bricks was keyed up to the foundations by means of iron wedges. The section was finally grouted through the pipes and the work completed. The most satisfactory feature of this part of the work was that, notwithstanding the large amount of excavation at each pier, there was absolutely no subsidence of the structure. Not even a single crack appeared in the surface of the bridge. This fact is somewhat remarkable when it is considered that the material to the extent of 130 cubic yards was taken out at each pier and replaced by blue brick set in cement.

There were 20 sections at each pier, and 12 sections at the abutments, of varying size, the largest being 6 feet long, 4 feet wide, and 8 feet high. When the underpinning at each pier or abutment was finished the shaft was filled up with rubble concrete and the relaying of the roadway was begun, concrete jack arching being laid from the side spandrils to the centre spandril wall. A layer of bitumen was laid on the top of the jack arching so as to prevent the surface water from reaching the arch stones.

At the soffit (or under side) of the arches it was decided to cut away all rotten portions of stone and make up the cavities with cement. After the bad stones in an area of a square yard had been cut out to a depth of 5 inches, a timber shield was placed over the face of the arch and securely wedged into position. A hole was then bored in this shield, and grout was forced through under a pressure varying from 55 lb. to 60 lb. per square inch. When no more cement could be inserted it was left to harden, and when the shield was removed the cement had formed into a perfectly smooth surface and the arch at this point was absolutely sound. The air compressor attached to the grouting plant was driven by a ¾ horse-power electric motor, which produced a pressure so high as 60 lb. per square inch with comparative ease.

On the completion of this work at the arches in the spring of 1909 the work of the engineer was practically finished, since the stability of the bridge was assured, and from then until the present spring the work was carried on by the architect and archæologist, Mr. James A. Morris [*F.*]. During the progress of the engineers' operations he had been making careful plans of the defective stonework with a view to cutting out the bad stones and replacing them

with new ones. This had been done partially before, but it was only about the beginning of 1909 that the engineer considered the structure secure enough to allow of many stones being renewed.

All the piers and part of the north abutment were completely refaced up to high-water mark, and a considerable number of stones in the face of the arches were also renewed, the new stones being joggled on to the old stones by means of molten lead run into a prepared notch. Both the parapets were taken down and rebuilt, partly with old and partly with new stones, but the old lines and curves were reproduced exactly. The remains of the old guard-house at the north end of the bridge were discovered during the removal of some old shops, and these remains have been surrounded by a railing, but are otherwise practically untouched.

The Conduct of Architectural Competitions in the United States.

The following is the circular of advice recently issued by the governing body of the American Institute of Architects with respect to the conduct of architectural competitions:—

Competitions are instituted with the sole purpose of advancing the interests of the owner. The American Institute of Architects believes that those interests are best served by fair and equitable agreements between owners and competitors, and it issues this circular as a statement of the principles which should underlie such agreements.

1. *On Competitions in General.*—A competition, when properly conducted, is a means for the selection of an architect. As an incident, a good preliminary scheme may sometimes be obtained, but the Institute is of the opinion that competitions are in the main of no advantage to the owner. It therefore recommends that, except in cases in which competition is unavoidable, an architect be employed upon the sole basis of his fitness for the work.

2. *On the Employment of a Professional Adviser.*—No competition should be instituted without the aid of a competent adviser. He should be an architect of the highest standing and his selection should be the owner's first step. He should be chosen with the greatest care, as the success of the competition will depend largely upon his experience and ability. His duties are to advise those who hold the competition as to its form and terms, to draw up the programme and to conduct the competition.

Competitions are at best slow and expensive methods of choosing an architect; and it is unwise to attempt to save either time or money by not having an expert adviser.

3. *On the Qualifications of Competitors.*—It is prejudicial to the interests of the owner that an architect should be admitted as a competitor who cannot in advance establish his competence to design and execute the work.

It is sometimes urged that by admitting all who wish to take part some unknown but brilliant designer may be found. If the object of a competition were a set of sketches, such reasoning might be valid. But sketches give no evidence that their author has the matured artistic ability to fulfil their promise, or that he has the technical knowledge necessary to control the design of the highly complex structure and equipment of a modern building, or that he has executive ability for large affairs or the force to compel the proper execution of contracts. The attempt to defend the owner's interests by associating an architect of ability with one lacking in experience has proven futile.

4. *On the Forms of Competition.*—The following forms of competition are recognised:

(*a*) *Limited.*—In this form participation is limited to a certain number of architects of ample qualification whose names are stated in the programme and to any one of whom the owner is willing to entrust the work. This form is generally employed by conservative owners having large interests at stake. It has the advantage that the owner and the professional adviser may meet the competitors and fully discuss the terms of the competition with them before the final issue of the programme.

The Institute is of the opinion that, unless cogent reasons prevent it, competitions should be of the limited form.

(*b*) *Open.*—This form has sometimes to be employed on account of legislative enactment. It consists in permitting all architects—or all within certain limits—without regard to their qualifications, to take part.

(*c*) *Open to Approved Applicants.*—In this form all architects who desire to compete make application accompanied by evidences of their professional capabilities. The owner, with the assistance of his professional adviser, determines which of such applicants he deems capable of properly executing his work and issues invitations to all or a limited number of them. This is obviously a much better form than the open competition, for if the standard be kept high, none but men of experience and ability will be admitted. Like the open competition, however, it fails to insure the participation of architects of the highest standing.

(*d*) *Mixed.*—In this form a limited competition is conducted simultaneously with one open to approved applicants, the programme being uniform for all. This form has the advantage of insuring the participation of architects of known ability.

(*e*) *Double.*—This form begins with a preliminary competition of any of the above forms. From the participants therein are chosen a small number to take part in a second competition involving more highly elaborated drawings. A variant of this form involves the selection, by means of a preliminary competition open to approved applicants, of certain architects who participate in the second competition with others specially invited. In this form the programme of each competition should be issued to all simultaneously.

The Institute fails to see that the results of double competitions have in any way justified the length of time consumed by them or the trouble and expense imposed on all concerned.

5. *On Anonymity of Competitors.*—Absolute and effective anonymity is a necessary condition of a fair and unbiassed competition. The signing of drawings should not be permitted nor should they bear any motto, device or distinguishing mark. Drawings and the accompanying sealed envelopes containing their authors' names should be numbered upon receipt, the envelopes remaining unopened until after the award.

6. *On the Cost of the Proposed Work.*—No statement of the intended cost of the work should be made unless it has been ascertained that the work as described in the programme can be properly executed within the sum named. In general it is wiser to limit the cubic contents of the building than to state a limit of cost.

The programme should neither require nor permit competitors to furnish their own or builders' estimates of the cost of executing the work in accordance with their designs. Such estimates are singularly unreliable. If the cubage be properly limited they are unnecessary, but if required, they should be made for all designs by one unprejudiced person employed by the owner.

7. *On the Jury of Award.*—To insure a wise and just award and to protect the interests of both the owner and the competitors, the competitive drawings should be submitted to the judgment of a jury so chosen as to secure expert knowledge and freedom from personal bias. For work of great importance the jury should consist of at least five members; for work of less importance three may suffice. The jury should be composed of architects, some of whom may be chosen by the competitors, and, when necessary, an expert on the special problem involved.

It is the duty of the jury to study carefully the programme and all conditions relating to the problem and the competi-

tion before examining the designs submitted; to place out of competition any design that does not fulfil the conditions distinctly stated as mandatory in the programme; to give ample time to the careful study of the designs; and to render a decision only after mature consideration. Unless there be strong reasons against it, the award of the jury should be binding on the competitors and the owner.

8. *On the Competitive Drawings.*—The purpose of an architectural competition is not to secure fully developed plans, but such evidence of skill in treating the essential elements of the problem as will assist in the selection of an architect. The drawings should, therefore, be as few in number and as simple in character as will express the general design of the building. Elaborate drawings are not necessary for a jury of experts whose judgment is rendered upon fundamental principles of design. Lengthy programmes and detailed instructions as to the desired accommodations should be avoided, as they confuse the problem and hamper the competitors.

9. *On the Programme.*—The programme should contain rules for the conduct of the competition, instructions for competitors and the jury, and the agreements between the owner and the competitors. Uniform conditions for all competitors are fundamental to the proper conduct of competitions.

Care should be taken that no provision of the programme be in violation of any Municipal, State or Federal law, and especially of any law under which the competition may be instituted.

A distinction should be clearly drawn between the mandatory and the advisory provisions of the programme, that is to say, between those provisions which if not met preclude an award in favour of the author of a design so failing, and those which are merely optional or of a suggestive character.

It is difficult to summarise briefly the programme, but it should at least:

(*a*) Name the owner of the structure forming the subject of the competition, and state whether the owner institutes the competition personally or through representatives. If the latter, name the representatives, state how their authority is derived and define its scope.

(*b*) State the kind of competition to be instituted, and in limited competitions name the competitors; or in open competitions, if the competition is limited geographically or otherwise, state the limits.

(*c*) Fix a time and place for the receipt of the designs. The time should not be altered except with the unanimous consent of the competitors.

(*d*) Furnish exact information as to the site.

(*e*) State the desired accommodation, avoiding detail.

(*f*) State the cost if it be fixed or, better, limit the cubic contents.

(*g*) Fix uniform requirements for the drawings, giving the number, the scale or scales, and the method of rendering.

(*h*) Forbid the submission of more than one design by any one competitor.

(*i*) Provide a method for insuring anonymity of submission.

(*j*) Name the members of the jury or provide for their selection. Define their powers and duties. If for legal reasons the jury may not make the final award, state such reasons and in whom such power is vested.

(*k*) Provide for placing out of competition any drawing or set of drawings that has violated a mandatory provision of the programme.

(*l*) Provide that during the competition there shall be no communication, except in writing, between any competitor and the owner or the professional adviser or a member of the jury; and that any information, whether in answer to such communication or not, shall be given in writing simultaneously to all competitors. Set a date after which no questions will be answered.

(*m*) State the number and amount of payments or prizes for competitors.

(*n*) If possible name a date before which the final decision will be rendered.

(*o*) Provide for informing each competitor of the result of the competition.

(*p*) When possible provide for a public exhibition of the drawings. Provide that no drawing shall be exhibited or made public until after the award of the jury, and not then without the consent of the author.

(*q*) Provide for the return of unsuccessful drawings to their respective authors within a reasonable time.

(*r*) Provide that nothing original in any of the unsuccessful designs shall be used without consent of and compensation to the author of the design in which it appears.

(*s*) Include the contract between the owner and the competitors.

(*t*) Include the contract between the owner and the architect receiving the award.

10. *On the Agreement.*—The programme should constitute a definite and binding contract between the owner and competitors, guaranteeing that an award of the commission to design and supervise the construction of the work will be made in favour of one of the competitors.

Payments to or prizes for unsuccessful competitors should be provided as follows:

(*a*) In limited competitions, to each competitor a payment to cover the cost of the preparation of the drawings demanded.

(*b*) In open competitions of either sort substantial prizes for a certain number of competitors adjudged to have produced the best work.

(*c*) In mixed or double competitions the several classes should be paid as above indicated.

The lack of a contract which becomes self-operative between the owner and the winner immediately upon the making of the award leaves their relations at a critical moment in an intolerable condition. Therefore the programme should, except in cases where such a course is not permitted by law, constitute a contract between the owner and the competitor to whom the commission is awarded, employing him to design and supervise the construction of the building. It should provide for procedure in accordance with and for payment at rates not lower than those named in the "Professional Practice of Architects and Schedule of Proper Minimum Charges" of the American Institute of Architects.

The contract should further provide that, immediately upon the making of the award, there shall be payable by the owner to the winner a sum equal to one-half of one per cent. of the estimated cost of the work for which the competition has been held, such payment upon the progress of the work merging in the total fee. Provision should also be made that should the owner for any reason wish to sever his relation with the winner, he may do so by paying him an additional sum equal to three-quarters of one per cent. (one and one-quarter per cent. in all) in lieu of carrying out the agreement to employ him as architect. Provision should further be made that if the owner fail, within twelve months of the award, to give the winner instructions to proceed with working drawings, or if at any time before the working drawings are started the intended work be abandoned, there shall fall due to the winner three-quarters of one per cent. (one and one-quarter per cent. in all) in lieu of carrying out the agreement to employ him as architect.

11. *On the Conduct of Architects.*—No architect shall submit in competition a design which has not been produced in his own office or under his own direction.

The Canons of Ethics of the American Institute of Architects declare that it is unprofessional conduct for an architect—

(1) To take part in any competition the terms of which

are not in harmony with the principles approved by the Institute.

(2) To attempt in any way, except as a duly authorised competitor, to secure work for which a competition is in progress.

(3) To attempt to influence, either directly or indirectly, the award in a competition in which he is a competitor.

(4) To accept the commission to do the work for which a competition has been instituted if he has acted in an advisory capacity, either in drawing the programme or making the award.

12. *On the Conduct of the Owner.*—In order to maintain absolute impartiality toward all competitors, the owner, his representatives, and all connected with the enterprise, should, as soon as a competition is determined upon, refrain from holding any communication in regard to it with any architect except the professional adviser. The meeting with competitors described in Article 4, Section (*a*), is of course an exception.

13. *On the Position of the American Institute of Architects.*—The Institute does not presume to dictate the owner's course in conducting competitions, but aims to assist him by advising the adoption of such methods as experience has proved just and wise. The Institute, however, entertains such definite convictions upon the subject of competitions that its convention held in Washington, D.C., December 14, 15 and 16, 1909, authorised the Board of Directors to issue this circular and to inform members that the following resolutions approved by that convention are in effect;—

RESOLVED.—*That it is unprofessional conduct for any member of the American Institute of Architects to take part as a competitor or juror in any competition unless its programme shall have received the formal approval of the Institute if the competition be open to members of more than one Chapter, or of the Chapter if the competition be open to members of only one Chapter; and that the Board of Directors be and it hereby is authorised to give such approval in the name of the Institute and to delegate this authority.*

Members are, therefore, informed that the above resolution will be in force on and after the 30th day of March 1910, and that the Board has delegated its authority to give the formal approval of the Institute on competition programmes to the Standing Committee on Competitions and to a sub-committee on Competitions in each Chapter of the Institute, of which sub-committee the President of the Chapter shall be the Chairman.

14. *On the Duties of the Standing Committee on Competitions and of Sub-Committees on Competitions.*—As competition practice must of necessity vary for different occasions and in different parts of the United States, considerable latitude of interpretation is given to the Standing Committee on Competitions and to sub-committees on competitions, which, however, should withhold the approval of the Institute unless in the main the programme conforms to the spirit of this circular.

Mandatory Instructions.—The following instructions are, however, mandatory. The approval of the Institute must be withheld from a competition—

(a) If it appear that the programme is not in consonance with the law;

(b) Unless the programme excludes from the competition all persons who cannot in advance establish to the satisfaction of the owner their competence to design and execute the work;

(c) Unless the programme provides for a professional adviser as called for in Article 2, or for a competent jury as called for in Article 7, or for both;

(d) Unless the programme constitutes definite contracts explicitly covering all the points set forth in Article 10.

Exceptions to Articles (b), (c), and (d) may be made only when and in so far as their provisions are contrary to law.

Competitions held by the Treasury Department of the United States under the Tarsney Act and International competitions do not require the approval of the Institute.

An appeal from the decision of any sub-committee may be made to the Standing Committee on Competitions of The American Institute of Architects, and thence to the Board of Directors.

Re-erection of Crosby Hall.

Nearly three years have elapsed since Crosby Hall disappeared from the City of London, and it has now been re-erected in More's Garden at Chelsea, where it will form part of the new University hall of residence. The work of reconstruction has been carried out with the utmost care by Messrs. Trollope and Colls, under the direction of the architects, Messrs. Wratten and Godfrey. All the stone and wood inside the building, and much of the external stone also, was marked and numbered, and has been replaced in the new building in corresponding positions to those occupied in the old one. The reconstructed building is a faithful reproduction of the Crosby Hall of the fifteenth century. Internally the Hall is almost exactly the same as before, the stones of the walls, the windows, and the oak rafters being those which formed part of the old Hall in the City. The old stone floor was too much damaged to be removed, and it has been replaced by a wooden one. The floor timbers of the musicians' gallery have been transferred to Chelsea and placed in their old position. It is hoped, in course of time, to erect an oak screen below the gallery, and also to replace the wooden front of the gallery as it must have been in olden times. At one end of the gallery, in the wall which had been built against in Bishopsgate, two new windows have been placed, corresponding to those at the opposite end of the gallery. A hexagonal oak lantern has also been erected over the roof in the position which such a lantern must have occupied formerly. The beautiful oriel window, with its stone vaulted ceiling, has been replaced in its former position. In the outer walls the old stone has been retained wherever possible. The Pageant Play with which it was proposed to mark the formal opening of the Hall has been postponed, owing to the death of King Edward, until next year.

Competition for Designs in Glazed Brickwork.

The Competition initiated by a Committee of Glazed Brick Manufacturers (noted in the JOURNAL for 5th March, p. 392) has resulted in the production of several designs of considerable merit, but none displayed such a combination of artistic quality with practical suitability to the material as, in the opinion of Mr. Max Clarke [*F.*], the Assessor appointed by the President R.I.B.A., would justify the award of the first premium to any individual designer. Several of the essays submitted have also been admirable, but in no case did a set of drawings and the essay sent with it attain anything like corresponding excellence. The Assessor has awarded prizes as follows:—50 guineas to "Grill," John Greaves and L. Mac-

donald Gill; 50 guineas to "Verona," Alexander Peacock; 25 guineas to "Bricklayer" (with a hod), F. Van Baars; and six prizes of 2 guineas each. It is understood that the Glazed Brick Manufacturers will circulate reproductions of the drawings and selections from the essays.

Annual Meeting of the Royal Archæological Institute.

This year's Meeting of the Royal Archæological Institute will be held at Oxford, from the 19th to the 28th July, under the Presidency of Lord Curzon, Chancellor of the University. The following is an outline of the programme:—

Tuesday, 19th July.—Reception by the Mayor at the Town Hall, followed by a reception by the University authorities and an address by Lord Curzon in the Sheldonian Theatre. In the afternoon, visits will be paid to the Bodleian Library, the Divinity School, Brasenose College, All Souls College, and the Church of St. Mary the Virgin. In the evening, Papers will be read in the Ashmolean Museum by Mr. W. H. St. John Hope on Dorchester Abbey Church and by Mr. Aymer Vallance on Ewelme Church and Hospital.

Wednesday, 20th July.—Visits to various buildings at Dorchester, Wallingford, Crowmarsh, Gifford, and Ewelme. In the evening, Paper by Mr. Aymer Vallance on the Development of the College Plan.

Thursday, 21st July.—Visits to the Colleges. In the evening, Paper by Mr. St. John Hope on the Early Beginnings of the English House.

Friday, 22nd July.—Visit to Christ Church, Eynsham, Stanton Harcourt and Yarnton. In the evening, Paper by Mr. C. Lynam on Oxford Castle.

Saturday, 23rd July.—Visit to Corpus Christi and Magdalen Colleges. Luncheon at Youlbury, by invitation of Dr. Arthur J. Evans, who will exhibit his valuable collections.

Monday, 25th July.—Visit to Oxford Castle, Tiddington, Rycote Chapel, and Thame, and possibly to the Old Court House at Crendon. In the evening, Paper by Professor Oman.

Tuesday, 26th July.—Excursion by special steamer down the Thames to Abingdon, where the visitors will be the guests of Col. and Mrs. Good of Sutton Courteney Abbey. In the evening, Paper by Mr. F. E. Howard on Fan-Vaults.

Wednesday, 27th July.—Visits to Broughton Castle, Bloxham and Adderbury and, if time permits, to King's Sutton. In the evening, the Annual General Meeting.

Thursday, 28th July.—Visits to Witney, Minster Lovell, and Burford.

The organisation of the Meeting is in the hands of Mr. G. D. Hardinge-Tyler, M.A., F.S.A., Secretary of the Institute, 20 Hanover Square, W. Non-members of the Royal Archæological Institute wishing to take part in the Meeting must be introduced by Members; the price of tickets to non-members is Two Guineas.

The A. A. Sketch-Book.

The first quarterly part for 1910 of the *Architectural Association Sketch-Book* is devoted entirely to reproductions of premiated and other drawings which figured in the exhibition last January, of works sent in for the R.I.B.A. Prizes and Studentships. The drawings represented—25 sheets in all—include (1) Perspective View of S. Maria delle Carceri, Prato, by A. G. Henderson; (2–7) Measured Drawings of the Wellington Monument, St. Paul's Cathedral, by J. M. Whitelaw; (8–12) Hôtel Carnavalet, Paris, by Cyril A. Farey; (13–15) Claypole Church, Lincs, by J. L. Berry; (16) Chapel of St. Leonard, Kirkstead, Lincs, and (17) Lantern Tower of St. Peter's, Howden, Yorks, by J. B. F. Cooper; (18) Rood Screen, Kinton Church, S. Devon, by W. T. Benslyn; (19) Measured Drawings of Steeple, St. Bride's, Fleet Street, by Walter L. Clarke; (20–24) W. Portico, St. Paul's Cathedral, by A. F. E. Poley; (25) Library, Trinity College, Cambridge, by C. D. Carus-Wilson. On the large scale of the *Sketch-Book* the reproductions appear to almost as much advantage as the originals themselves, and the Editors are to be congratulated upon this useful and very handsome memento of the year's exhibition.

The late H. L. Fedden [*F.*].

Herbert Launcelot Fedden, whose death occurred on the 3rd May, was elected a Fellow of the Institute in 1907. He was articled to Mr. Mervyn Macartney, and after serving in the offices of Messrs. Edmeston & Gabriel, Messrs. Kidner & Berry, Mr. H. O. Cresswell, and the Housing Department of the L.C.C., started practice in Hart Street, W.C., moving afterwards to Great Russell Street, and finally to Bloomsbury Square. His practice consisted mostly of country work, and amongst others, houses were erected or altered from his designs at Caterham, Margate, Lee-on-Solent, Ashampstead, Catts Farm near Newbury, Bungalow at Chaldon, Surrey, "The Fields," St. Briavels Common (near Monmouth) and Moody's Down, Barton Stacey. Mr. Fedden was a good water-colour painter. His own drawings of executed work were on several occasions exhibited at the Royal Academy.—Frank J. Potter [*A.*].

The Illuminating Engineering Society.

This Society was formed last year with the object of bringing together engineers, architects, members of the medical profession, and others interested in illumination, in order that an impartial and international platform might be provided for the discussion of problems of this kind. During the session the membership has steadily increased, and is also of a very representative character. The inaugural meeting took place on 18th November, 1909, when the President, Professor S. P. Thompson, D.Sc., delivered the opening address. This was followed by four discussions in 1910 on "Glare, its Causes and Effects," and "The Measurement of Light and Illumination" respectively. A feature of the proceedings was the exhibition, by the inventors, of different types of instruments, and the demonstration of their actual use in practice. Contributions to these discussions were made by eminent foreign members of the Society. For the next session arrangements are being made for papers on such subjects as the lighting of streets, shops, libraries, schools, &c., and the recent development of gas and electric lighting, &c.

SOME THOUGHTS UPON THE POSSIBLE ORIGIN OF THE DORIC ORDER OF GREEK ARCHITECTURE.

By Francis Edward Masey [*F.*].

The following notes were written during a visit to the Mediterranean some three or four years ago, and after a careful examination not only of the remains of buildings *in situ*, but also of the richly furnished museums of Cairo and Palermo, of Athens and Naples. In such congenial and inspiring surroundings the dry bones of "the Classic Orders" seem to take flesh and to live again. The Greek Doric style is no longer presented in the cold completeness and thin perfection of copperplate engravings, but becomes a tangible reality woven into the history of the fierce, struggling, cruel, clever races that lived and fought and died and passed on the torch of their art traditions for hundreds, nay thousands, of years before the advent of the Periclean Athens whose achievements are so well taught to the youth of the Royal Academy Schools. In those student days the writer had been puzzled by the want of any explanation of the mysterious and sometimes unmeaning nature of the details of the "Doric style," and had turned vainly to the "introduction" where, illustrated by a few woodcuts borrowed from Viollet-le-Duc and others, a brief description was given of the theory of its supposed origin across which improbability was written large, demanding an amount of faith and imagination equal to that required of the young scientific inquirer who is told that if in the first chapter of Genesis he reads for days "epochs" or "periods" all apparent conflict between dogma and scientific truth will disappear.

It is not surprising, therefore, to find in these days of advanced research a certain scepticism with regard to the probability or otherwise of any wood construction having, however indirectly, inspired the massive limbs of early Doric—a scepticism which is the more excusable when it is remembered that the further back we trace its remains the more massive is their character, and consequently the more difficult to link to their origin with their alleged slender prototype.

Further discoveries, more careful study, and—above all—the wonderful growth during recent years of a new and more courageous spirit of criticism have contributed fresh links to the chain of evidence, or at any rate of suggestions, although the conclusions they seem to point to have not, so far as the writer knows, hitherto been drawn attention to.

I will state at once my belief that the main ground of error and source of difficulty in the past has lain in attempting to trace the origin of the style from a wood prototype, due to the supposition of the whole "order" being derived simultaneously from a common origin or under identical conditions. If, however, we separate the constructive features into their two natural divisions, the wall and the roof, *i.e.* to consider the probability of the column and lintel owing their development to entirely different sources from that of the roof with its constructional and decorative features, the obscurity and improbability surrounding the inquiry begin at once to disappear.

Let us try to follow the conclusions towards which this treatment of the subject leads us. The column and lintel in Greek Doric thus taken in themselves need no fantastic theory to explain the origin of their proportions, history, and development. Their descent can be readily traced from prehistoric monuments common to all the peoples of the Mediterranean and North-West Europe which abound from Sardinia to Stonehenge, whilst for direct inspiration we need look no further than Egypt, bordering upon the Mediterranean Sea—that great highway of communication and contact between the peoples of the ancient world.

I submit, then, that all available evidence points to the prototype of the colonnade and lintel being of far greater antiquity than the wood roof, which they became subsequently the means of supporting, and this, if accepted, disposes at once of the unreasonable theory that enormously massive columns and lintels were designed to support a ceiling and roof of wood.

The earliest structures, as we may learn by recent discoveries, took the form of a dolmen or cella;* or, in later developments, if a treasury were to be enriched or an important tomb to be honoured, with an added peristyle. The roof seems later to have been developed, connecting the peristyle with the cella; and this proving insufficiently resistive to accident, time, and weather, a protecting sheathing was applied to cover the more exposed parts.

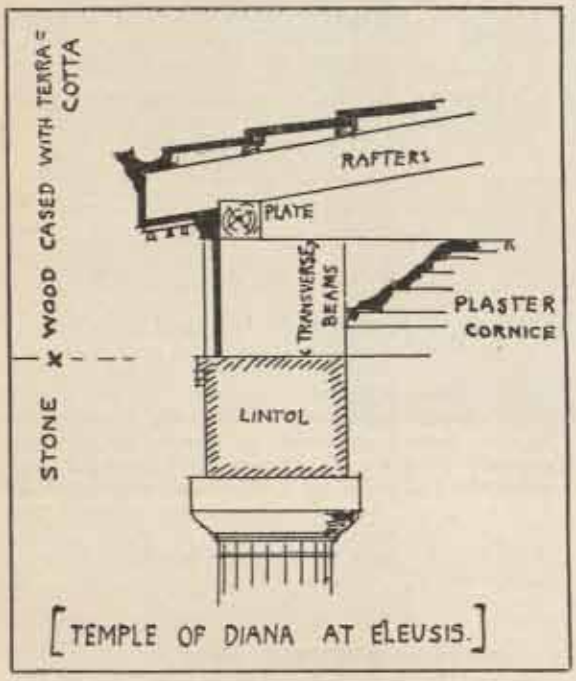
In this connection the reader needs no reminder of the high degree of development in the plastic arts reached by the Mediterranean peoples in remotest times as evidenced by the richness of their remains, and also of their extensive use in temple-building, as shown by the quantity of terra-cotta débris which has been found from time to time during the excavations at Olympia and elsewhere.

It seems probable that the column and lintel of stone supported, in the earliest developments of the style, cross beams having their ends cased by terra-cotta tiles, the spaces between filled by modelled panels called metopes of the same material, whilst the rafter ends forming the eaves were cased in a similar manner, crowned with a gutter formed to collect the rain-water.

It is suggested that this stage of development combining the stone supports with the protected roof woodwork once having been reached, probably lasted through centuries—sufficiently long for it to have assumed stereotyped forms dictated from the constructional necessities, until the progress of the

* It is instructive to note the persistence of tradition in the ancient Etruscan preference for circular structures in the monuments of Rome.

centuries, providing increased facilities together with growing needs and ambition, achieved a stone construction throughout, although following in its forms what had become traditional treatment. (*See illustration.*)



[TEMPLE OF DIANA AT ELEUSIS.]

I would here submit evidence of a few indications which may be considered as offering some encouragement of the conclusions I have formed and put forth here for criticism :—

(A) The raking line taken not only by the cornice, but by its soffit following the slope of the rafters, is an obvious treatment, assuming that terra-cotta slabs protected their exposed surfaces. Notice also the bed-mould to cover the wall plate—flat in sections as becoming an applied casing, shallow in character, and enriched with the egg-and-dart identical with the same mould found upon various early Greek terra-cottas.

(B) The treatment of the triglyphs, the curious design of which hitherto has not been satisfactorily explained, *i.e.* the grooves. If one admits their suggested origin the reason is at once found in the necessity of forming these grooves to assist the even baking of large tiles—a custom still surviving in the tiles manufactured to this day in Marseilles.

(C) The treatment of the metopes. These have always been a puzzle to the writer from the fact that the delicacy and detached treatment of this decoration seems so out of relation, and of scale, with the almost terrible severity and the massive character of the beams and columns immediately beneath them. The freedom and elasticity of this treatment is essentially one born of bas-relief worked in a plastic material, but which has kept its original traditional character even after becoming stereotyped like the cornice features into a formal academic "style."

(D) The indication of painted decoration, which, assuming the theory we advance to be worthy of consideration, is readily accounted for; for we have evidence that the early Etruscan terra-cottas were *invariably* painted, whilst apart from this custom it would seem naturally desirable to so treat them in order to bring them into harmonious tone and texture with the stone or marble treatment below. In support of this view we have the evidence that, where painting has continued to the above-mentioned features (supposing they had been imitated later in marble and stone), they bear strong family likeness to similar decoration upon the early vases, as may be seen in the remains of Selinunto, in the museum at Palermo, and elsewhere.

Again, have we not further support for our view in the fact that when marble was not forthcoming it was the custom to plaster and decorate the stonework, following the treatment employed in the case of terra-cotta?

This would also account for the painting of certain features of the temples when they were entirely in marble, for it will be found that it was applied to those features of the entablature which we are endeavouring to trace as having been traditionally so treated from remote terra-cotta ancestry.

Perhaps as an added note I may point out that the treatment of ceilings in Doric architecture, such as remains, suggests an original prototype in wood construction, the beams cased with terra-cotta supporting panel tiles of the same material laid upon their upper side.

Positive evidence in support of these conclusions is perhaps furnished by the fact that only the columns and lintels are found preserved among the remains of certain temples; the disappearance of the cornices, ceilings, and roof, owing to their more perishable nature, leaving intact the stone supports, would thus be readily accounted for. The thin and britile terra-cotta casing would naturally quickly disappear when the disintegration of the woodwork had once taken place.

The gradual development suggested in the above notes involves no revolutionary disturbance of accepted theories, but rather points to a more gradual change, accounted for by the desire for greater permanency in construction for sacred buildings because of the noble uses to which they were dedicated, as well as the practical benefits offered to so supremely important erections, ensuring protection from fire, time, weather, or the enemy, whilst it explains all that has hitherto seemed improbable and contrary to common-sense in previous theories attempting to materialise that mysterious period of transition (which is felt to have existed, although never able to be proved) for the acceptance of practical minds.

I hope it may be found upon closer examination

that the evidence claimed for this theory may be considered not only uncontradicted by any existing indications, but rather as helping to supply a reasonable explanation, in however crude a form, of much that hitherto has been difficult to understand in the great temple style, due to the circumstance that it has been only handed down to us at the latest and most permanent stage of its development.

CORRESPONDENCE.

STANDARDISATION OF FORMULÆ.

227 *and* 228 *Strand, W.C.: 5th May* 1910.

To the Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—Some months ago a suggestion as to the standardisation of the symbols used in formulæ emanated from the Concrete Institute, and I am given to understand that the question has been referred for consideration to the Joint Committee on Reinforced Concrete, which now appears to be resuming those labours which were so fruitful of result a few years back. Of enthusiasm on the question of formulæ it is obviously impossible to raise the slightest spark. Yet, in the science of structural design, formulæ constitute the everyday tools of the trade, and the modern practice of architecture is such that few buildings are erected in which some statical calculations are not necessary. Consequently I believe that if it should be found possible satisfactorily to standardise the symbols used, and generally to untie the unnecessary knots with which the subject of formulæ is bound, the work would be much appreciated by the majority of architects. The fact that the profession as a whole is practically inarticulate on the subject does not denote so much a lack of interest as a lack of hope in the prospect of simplifying the structural formulæ in present use. The Joint Committee, when dealing with reinforced concrete, succeeded in a big task, and I suggest that, in this case of the standardisation of formulæ, the labour is less arduous—the spade work having already been done by the Concrete Institute—and the value of successful achievement is at least quite as great. I trust that the Committee have decided to concentrate their energies on this question.—Yours faithfully,

HORACE CUBITT [*A.*].

STONE ROOD, ST. PETER'S, BARTON.

Royal Archæological Institute: 19th May 1910.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—I venture to correct an error which appears on page 552 of the JOURNAL R.I.B.A. for 7th May. There Mr. Francis Bond states that not a single member of the Royal Archæological Institute, at their visit to one of the Barton churches last year, noticed the stone rood, Mary and John, carved on the mullions of an aisle window.

This statement is incorrect. I organised and was present at the meeting, and I know that it was noticed by many and pointed out to others by Mr. W. H. St. John Hope and Mr. Aymer Vallance. Moreover, a reference to it appears in the report of the meeting in the *Archæological Journal*, lxvi, 357.

It would be a strange thing if not one of over a hundred members who were present at St. Peter's church, Barton-on-Humber, on July 26 last should have noticed so well-known a feature as the stone rood on the east window of the north aisle.

Your obedient servant,

G. D. HARDINGE-TYLER,
Secretary, Royal Archæological Institute.

ALLIED SOCIETIES.

The Royal Institute of the Architects of Ireland.—A Special Meeting of the Council was held on the 9th inst., Mr. G. C. Ashlin, R.H.A. [*F.*], presiding, and the following resolution was passed:—"We, the Council of the Royal Institute of the Architects of Ireland in meeting assembled, desire to express our profound sorrow at the death of our revered and honoured Sovereign, His Majesty King Edward VII., and to convey with loyal and dutiful respect to His Majesty King George V., the Queen Consort, and the other members of the Royal Family our deepest sympathy in their sad bereavement."

MINUTES. XIV.

At the Fourteenth General Meeting of the Session 1909–10, held Monday, 23rd May 1910, at 8 p.m.—Present: Mr. Ernest George, A.R.A., *President*, in the Chair; 25 Fellows (including 9 members of the Council), 33 Associates (including 2 members of the Council), 2 Hon. Associates, and several visitors—the Minutes of the Annual General Meeting held 2nd May 1910 having been already published [*ante*, p. 556] were taken as read and signed as correct.

The President having referred to the death of his Majesty King Edward VII., the Patron of the Royal Institute, the Secretary read the Address which the Council, with the approval of the meeting, purposed sending to the Home Secretary for submission to his present Majesty.

The adoption of the Address having been formally moved, and Mr. Edwin T. Hall having spoken thereto, the motion was carried in silence, all present standing.

The President announced that the Town Planning Conference and Annual Dinner would be postponed till October.

The Hon. Secretary announced the death of Herbert Launcelot Fedden, *Fellow*, elected 1907.

The Hon. Secretary further announced the death of Professor George Aitchison, R.A., *Past President*, and it was resolved that the regrets of the Institute for the loss it had sustained be entered on the Minutes, and that a message of sympathy and condolence be addressed to the relatives of the late Fellow.

The following Associates attending for the first time since their election were formally admitted—viz., Herbert Kenchington and Geoffrey Hyde Williams.

A Paper by Mr. E. A. Rickards [*F.*] entitled "The Art of the Monument" having been read by the author and illustrated by lantern slides, a discussion ensued, and a vote of thanks was passed to Mr. Rickards by acclamation.

The Meeting separated at 9.55 p.m.



The West Front of the Parthenon Athens.

GEOMETRY AS APPLIED TO GREEK ARCHITECTURE.

By G. S. Aitken.

A Lecture delivered to the Edinburgh Architectural Association, 17th November 1909.

THERE is nothing on record of the use of any system of geometry in connection with ancient Greek architecture except general statements in Vitruvius which are not of any service as an absolute guide. Vitruvius remarks that "the architect after designing his building subjected it to the changes suitable to the point of view from which it was to be seen," his further words being, "when therefore the kind of symmetry and the magnitudes are settled, it is then the part of the judgment to adapt them to the nature of the place, of the use, or the species, and by diminutions or additions to qualify the symmetry till it appears rightly adjusted and leaves nothing defective in its appearance." "The mode of the symmetry therefore being first fixed, the alterations are to be made thereon." So that the Greek buildings as we see them were designed as if observed from some particular point of view. This is quite reasonable if they were to be looked at always from one unvarying place; but as that is not the case, we cannot understand where the advantages of diminution or addition come in.

Mr. James Pennethorne wrote and illustrated an excellent volume in which he applied this principle of Vitruvius to the Parthenon and Erechtheum, observing, as regarded the Caryatidæ Portico of the latter, that it did not appear anything had been done by the architect to modify it after its original conception. Mr. Pennethorne's course of procedure was to use the fact that the eye sees everything as on a curved surface, and not on a flat plane, then, choosing some point on the line of the Panathenaic procession at which the people might be expected to stand still and survey the buildings, he erected a vertical curved surface having the spectator as its centre. On this he projected the horizontal lines of the entablature and stylobate as they existed in the executed building, holding that these lines as projected on the curved surface presented the appearance the architect desired them to have in reality, he, in order to attain this end,

having raised the building to a higher level than that represented in his original drawing. Mr. Pennethorne, deducting the set of heights projected on the curved surface from those of the executed building, put the result on record as the amount of addition made by the architect to his original design.

Diminutions occurred when such parts as the stylobate and cornices would have appeared heavier than as represented in the first conception by reason of their various projections; these would therefore be diminished in order to avoid this. Thus Mr. Pennethorne complied with Vitruvius' canon of additions and diminutions. His work covered the years from 1832 to 1837, and also included a study of the curves of the stylobate and the entasis of the columns, but his book was not published till the year 1878.

Mr. F. C. Penrose took up the latter subject in 1846, and a very carefully illustrated volume by him was published under the auspices of the Society of Dilettanti, showing the system of curvatures, entasis, and the use of subtle geometrical sections in the profiles of the mouldings, establishing the fact that the Greeks paid great attention to optical refinements.

But a subject of more importance than refinements is that of proportion, which concerns the relation that height has to width and depth, both on the whole building and the detailed parts. In ancient theories of proportion it was thought that everything should combine in aliquot parts. If the matter involved was the form of a room, then so many parts were to go to the length and so many to the width and height.

Mr. Pennethorne very interestingly illustrated this in an analysis of the Egyptian tomb of Setho I., discovered by Belzoni, where he found the length of the principal chamber to be 381 inches, which, divided by 18, gave 21.16 inches as a module; 11 of these modules fixed the breadth, and 11 the height.

Vitruvius gives also careful formularies for deciding on dimensions in Grecian Doric architecture, as, for instance, that a tetrastyle front should be divided into $11\frac{1}{2}$ parts, hexastyle into 18, and octastyle $24\frac{1}{4}$, one part in each case being devoted to the diameter of the columns: these divisions also regulating the sizes of the various details; but this system of division and its results are not substantiated by any known example. He also allocates so many diameters to the heights of the Doric and Ionic orders.

But, after all, this or any other arbitrary system does not determine what is required to make a pleasing building. The module used by Mr. Pennethorne might have been with propriety some other dimension; so that we must go further afield to discover a system which will establish a base for right proportion.

Mr. Watkiss Lloyd made a valuable analytical contribution on the proportion of Greek architecture some years ago when he found certain ratios prevailing among relative parts of the Parthenon, such as 4 : 9, 12 : 7, 9 : 10, 6 : 11. From these, which it must be remembered are quite arbitrary figures and not founded on any principle—for the 4 : 9 might as well have been 3 : 9—it is possible to build up the Parthenon façade.

For example, the diameter of the column may be determined by dividing the intercolumniation 14.09 from axis to axis into 9 parts and giving 4 of these to the column, so using the formula 9 : 4.

But there are two weak links in the chain of reasoning, inasmuch as before the widths of intercolumniations could be determined, the width of the triglyph had to be fixed and deducted from the length of the stylobate line, which then, divided by 7, gave the amount of intercolumniation; and, further, the height of stylobate has to be assumed, and none of the ratios provides for it.

Mr. Lloyd also mentioned that the breadth of a column abacus should bear either a rectangular proportion to the length of the top step of the stylobate or to both. The Theseum abacus is one-fifth the height of the column and one-twelfth of the top step. At Bassae the

abacus is one-fifth of the height of the column, but it is not commensurate with the top step. Mr. Pennethorne had anticipated this use of the abacus by finding that if the Parthenon abacus was divided in its breadth into 15 parts, the upper diameter of the column contains 11 of these parts, and the lower 14. And he found that if the N. Erechtheum capital was divided into 14 parts across the volutes, the upper diameter had 10 and the lower 12 of them ; but there does not appear to have been any fixed number for division, the Theseum taking 10, the side propyleum 25, and so forth.

But none of these coincidences answers our question, What forms good proportion, and how may it be attained ?

Is it to be found bearing any relation to the diatonic chords of music ? There are hints in ancient literature that Greek architecture was designed to have some such connection, and Mr. D. R. Hay followed out that theory with great ingenuity, fixing on certain angles as representing particular notes which form musical chords, assuming that if these were combined in a building, harmony would result. He selected divisions which were aliquot parts of 90°, and these were $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$, $\frac{1}{7}$, corresponding with the angles of 45°, 30°, 22½°, 18°, 15° and 12⅞°. From these he chose three—viz. 30°, 22½° and 18°, applying them with apparent success to the Parthenon façade.

Professor Kelland, who occupied the mathematical chair in Edinburgh University in Mr. Hay's time, took up the theory and supported it by stating as its justification that a figure is pleasing to the eye in the same degree as its fundamental angle bears to the other angles the same proportion that the vibrations bear to one another in a common chord of music. But of course the difficulty lies in proving any accord of particular angles with notes that make chords in music ; and till this is done, the analogy is incomplete.

Having occasion to give a lecture in the beginning of this year on " How to Know Good Architecture," and the subject of proportion necessarily presenting itself for consideration, I applied Mr. Hay's system of angles to a large drawing of the Parthenon, only to find that his three angles of 30°, 22½° and 18° were not coincident with the points they were represented as touching in the small drawing which appeared in his interesting work published in the year 1851—the lines when they reached the points being 15 inches too low in each case. It is only right, however, to remark that this is what would happen if Mr. Pennethorne's optical theory is correct, though not to a greater extent than six inches : Mr. Pennethorne's figures of correction in height being 5.55 inches for the columns, and for the whole height 4.85 inches.

Fresh light on the subject of proportion is afforded in a letter by Mr. John Harrington, written on May 22, 1693, to Sir Isaac Newton, to which Newton replied in a letter which is worth quoting in full :—

Sir,—By the hands of your friend I was favoured with your demonstration of the harmonic ratios from the ordinance of the 47th of Euclid. I see you have reduced from this wonderful proposition the inharmonies as well as the coincidences of agreement all resulting from the given lines 3, 4, 5. You observe that the multiples hereof furnish those ratios that afford pleasure to the eye in architectural design ; and that the idea of beauty in surveying objects arises from their respective approximations to the simple constructions : and that the pleasure is more or less as the approaches are nearer to the harmonic ratios. I believe you are right ; portions of circles are more or less agreeable as the segments give the idea of the perfect figure from which they are derived. Your examination of the sides of polygons with rectangles certainly quadrates with the harmonic ratios. In fine I am inclined to believe some general laws of the Creator prevailed with respect to the agreeable or unpleasing affections of all our senses ; at least the supposition does not derogate from the wisdom and power of God, and seems highly consonant to the simplicity of the microcosm in general.—Your humble servant,

Isaac Newton.

30th May 1693.

Newton in this reply makes a suggestion which no one seems to have taken up, viz. : that where the ratios 3, 4, 5 prevail, the proportions will be good.

There are two ways of applying these ratios, first to the *areas* which the angles 3, 4 and 5 or their equivalents 30°, 22½° and 18° enclose ; or second, to the three intervals of space which are left between the ends of these lines when circumscribed by an arc, and the vertical line which is tangential with that arc.

In the first case they do not apply, for if we examine the Parthenon and take the three areas enclosed by these lines, viz. the columns, the entablature and the pediment, the superficies of the columnar space which may be accepted as equivalent to 5, far exceeds the combined superficies of the entablature and pediment which may be considered as equal to the other two figures of 4 and 3. In the columnar area the superficies is 3,400 feet, the other two combined amount to 2,450 feet, so this cannot be the correct application of it.

Neither is the second method of any service, as the intervals of space formed by the three angles are respectively 6 feet, 9 feet and 18 feet, in the case of the Parthenon, and the remaining thirty temples which are before us for consideration are also out of count as regards both methods.

But although the first of Newton's suggestions fails there is a second which will give us a clue towards a successful theory, and it is to be found in these words in a later part of his letter, "Your examination of the sides of polygons with rectangles certainly quadrates with the harmonic ratios." We need not accept this hint in its full bearing, or consider the intricacies of calculation which that acceptance would involve, but simply confine ourselves to the words "sides of polygons" and work on them as a basis. The forms which the sides of polygons give us are the triangle, pentagon, hexagon and octagon ; the triangle has affinity with the tetrastyle form of Greek front, the pentagon by doubling may be considered as related to the decastyle, the hexagon to the hexastyle, and by doubling to the do-decastyle, and the octagon to the octastyle ; but as there are only two examples of the ten columned and but one of the twelve columned frontages under consideration, we may discard them and their geometric analogues from our notice ; and besides, they are covered by the hexagon and octagon, to which forms we propose to confine our attention.

In this way I submit we shall answer the question, How did the Greeks design their temples ? and what is the secret of the good proportion to be found therein ? The hexagon then, when we resolve it into all its possible angles, gives us 60° and 30°, the octagon furnishes 67½°, 45° and 22½°. Let us see what we can do with them.

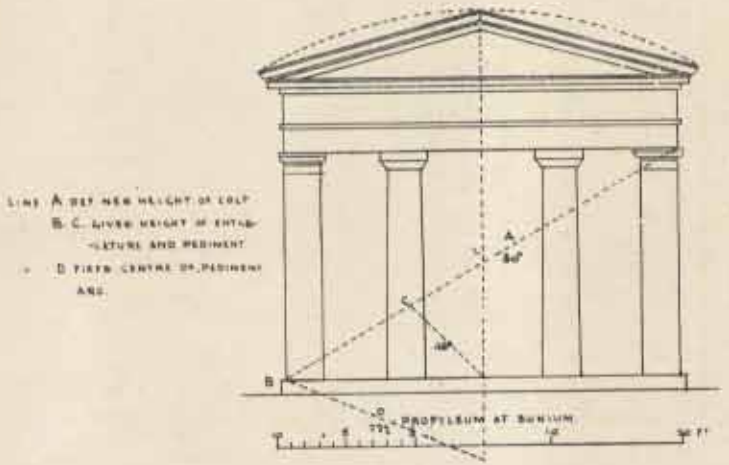
Beginning with the Parthenon, we find that it and all the other temples are constructible by means of the five angles above enumerated.

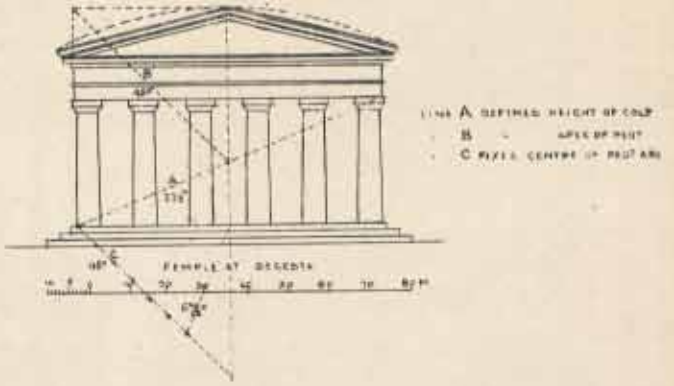
In the instance of the Parthenon an angle of 60° produced downwards from the top of the stylobate to a point at the centre of the façade, and from that point an angle of 67½° carried upwards, will define the columns to the underside of the abacus ; and then an angle of 30° from the same stylobate point downwards to the centre, and from thence of 60° upwards, will give the level of the top of the pediment ; the slope of the pediment is outlined by an arc which has for its radius the diagonal of the whole front.

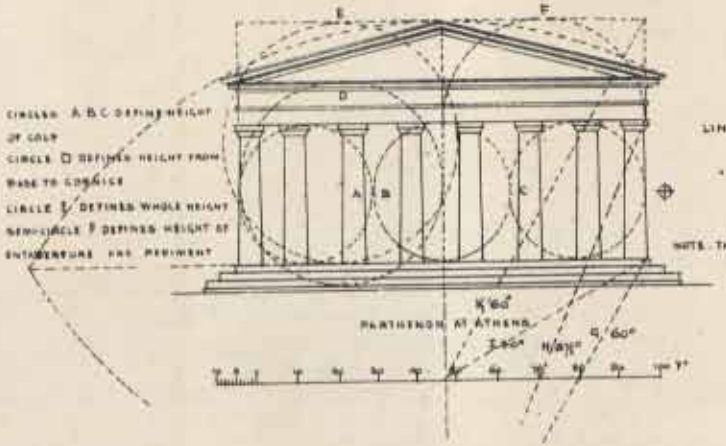
The Theseum surpasses this process in simplicity by only requiring one diagonal of 22½° for its columns, and one of 30° for the entablature and pediment. Then we find the columnar façades in nine cases form rectangles of which the diagonals are either 30° or 22½°—three being of 30° (two Ionic, one Doric) and six of 22½° (Doric).

Other examples of our series are formed either by lines which go upwards from a given centre, as do those of the Parthenon ; or by radii and arcs for which the centres are found by angles starting from the top of the stylobate. Of the former, four in number, we may take the instance of Apollo Didymaeus ; and of the latter, which are nine in number, the temple of Sunium, which has an arc whose radius is formed by intersecting an angle of 22½° with one of

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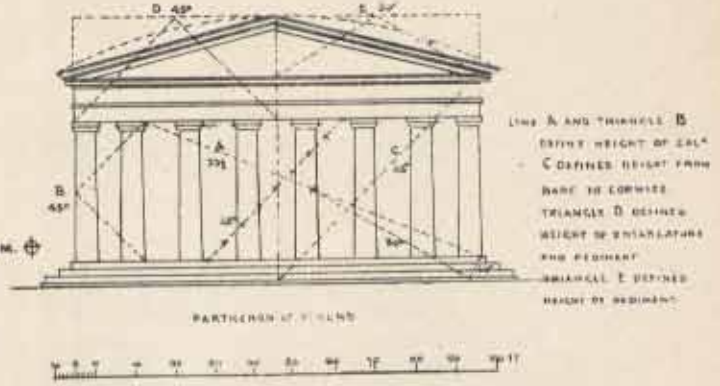


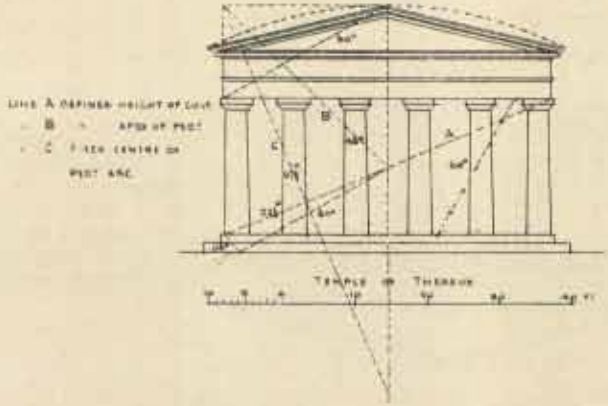




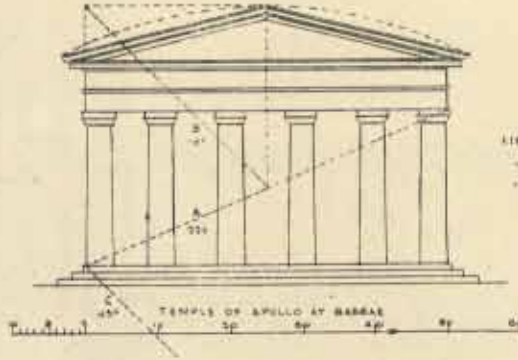
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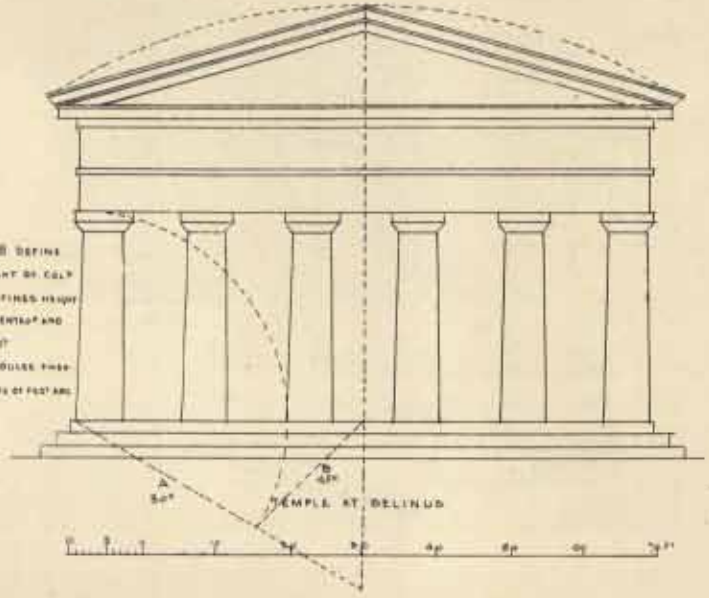




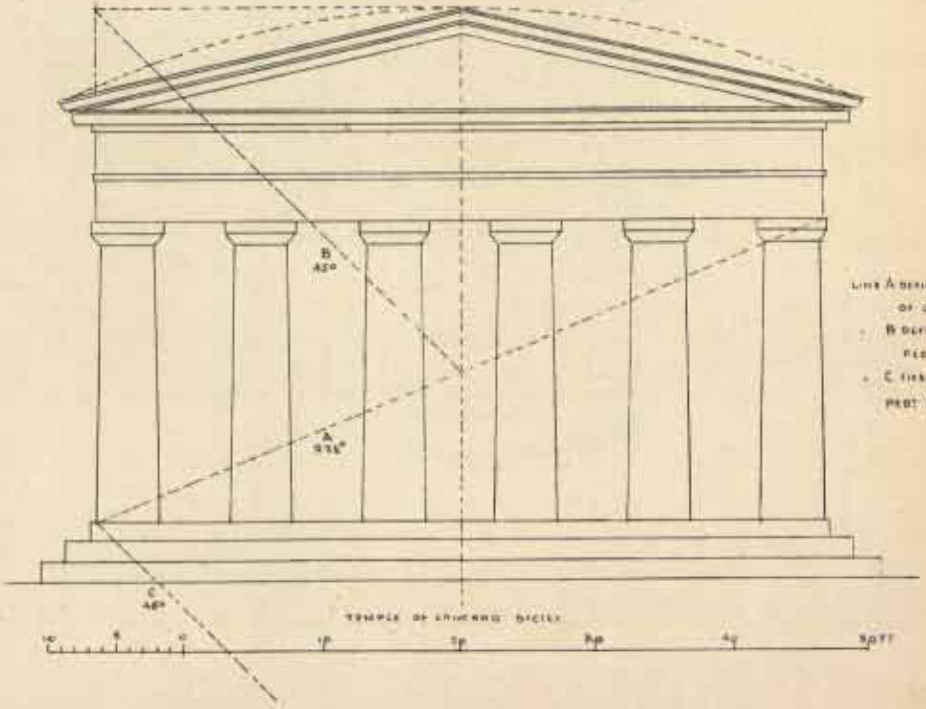
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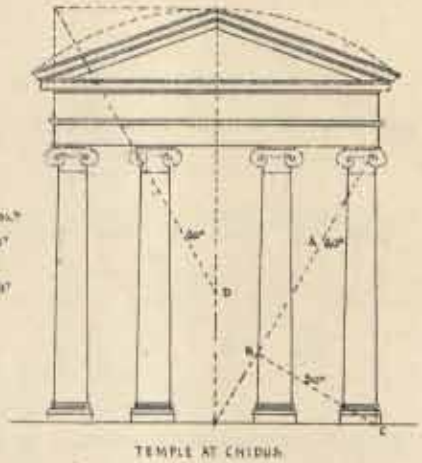
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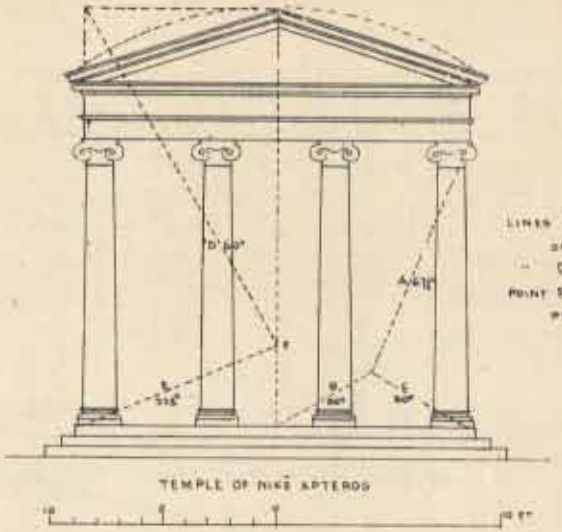


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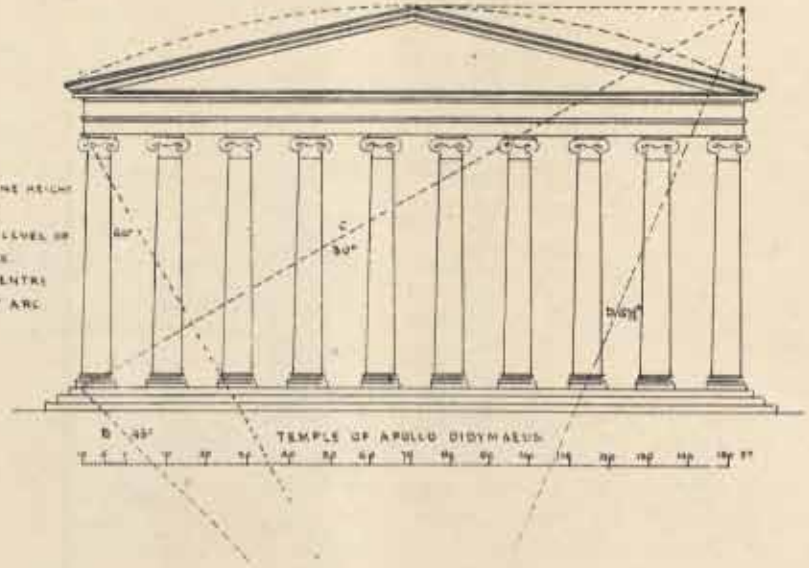
LINE A DEFINES HEIGHT OF COL^N
" B.C. GIVES HEIGHT OF PED^T AND ENTABLATURE
POINT D GIVES CENTRE FOR PED^T ARC

TEMPLE AT CHIDUS



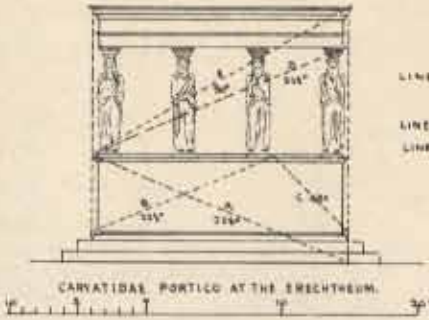
LINES A.B.C. DEFINE HEIGHT OF COL^N
" D.E FIX APEX OF PED^T
POINT F GIVES CENTRE FOR PED^T ARC.

TEMPLE OF NIKE APTEROS



LINES A.B DEFINE HEIGHT OF COL^N
L^NE C. FIXES LEVEL OF PED^T APEX
D GIVE CENTRE FOR PED^T ARC

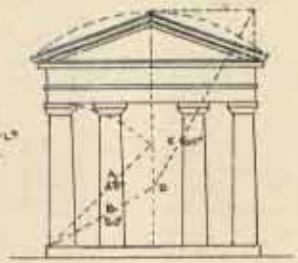
TEMPLE OF APOLLO DIDYMAEUS



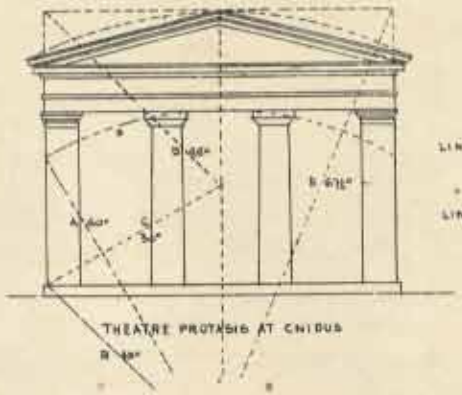
LINE A DEFINES HEIGHT OF PODIUM AND STYLOBATE
LINES B.C. DEFINE HEIGHT OF PODIUM
LINES D.E DEFINE " OF CARYATIDES AND CORNICE

CARYATIDAE PORTICO AT THE ERECHTHEUM.

LINE A DEFINES HEIGHT OF COL^N
LINES B.C. FIX LEVEL OF PED^T APEX.
POINT D GIVES CENTRE FOR PED^T ARC.



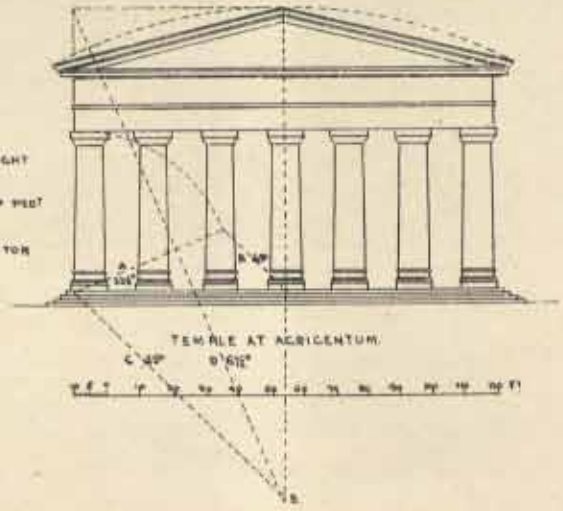
TEMPLE AT ATHENS



LINES A.B. AND ARC ^T DEFINE HEIGHT OF COL^N
" C.D. FIX LEVEL OF PED^T APEX
LINE E GIVES CENTRE FOR PED^T ARC.

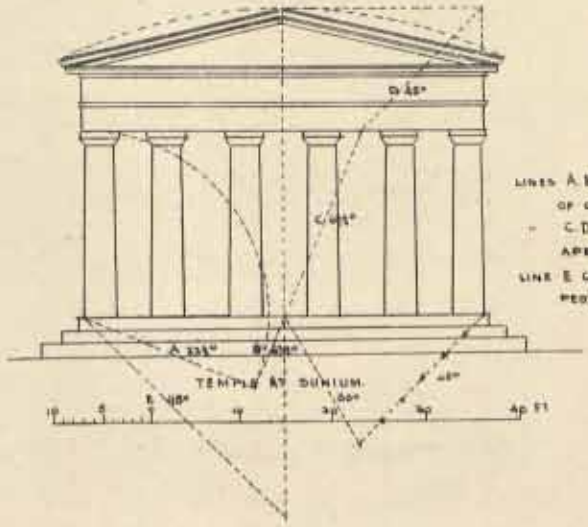
THEATRE PROTASIS AT CNIDUS

LINES A.B. DEFINE HEIGHT OF COL^N
" C.D FIX LEVEL OF PED^T APEX
POINT E GIVES CENTRE FOR PED^T ARC.

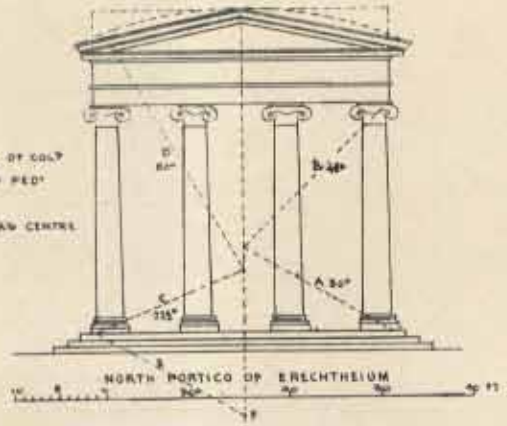


TEMPLE AT AGRICENTUM.

LINES A.B. DEFINE HEIGHT OF COL^N
" C.D FIX LEVEL OF PED^T APEX
LINE E GIVES CENTRE FOR PED^T ARC

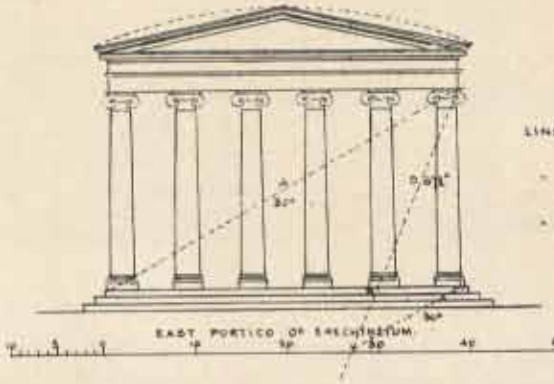


TEMPLE AT SUNIUM.



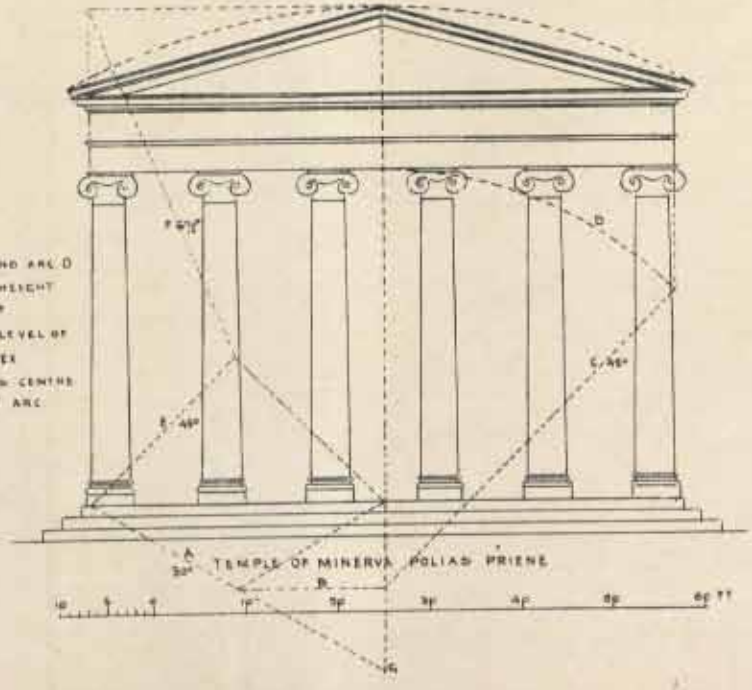
LINES A. B. DEFINE HEIGHT OF COL.ᴺ
– C. D. FIX LEVEL OF PED.ᵀ APEX
LINE E. GIVES POINT F AS CENTRE OF PED.ᵀ ARC.

NORTH PORTICO OF ERECHTHEIUM



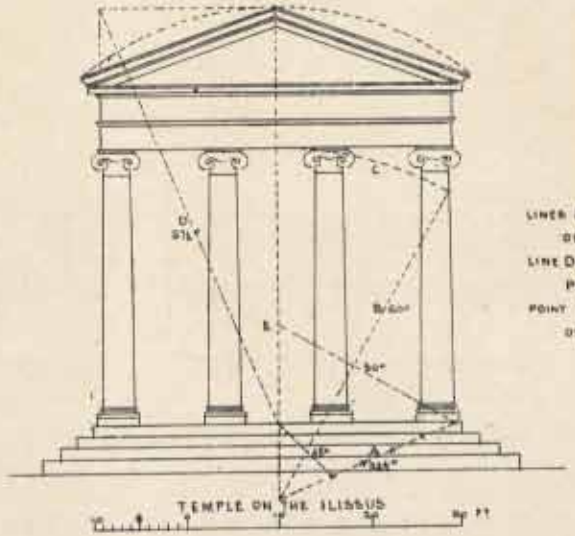
LINE A DEFINES HEIGHT OF COL.ᴺ
– B.C GIVES HEIGHT OF PED.ᵀ
– D GIVES CENTRE OF PED.ᵀ ARC.

EAST PORTICO OF ERECHTHEUM



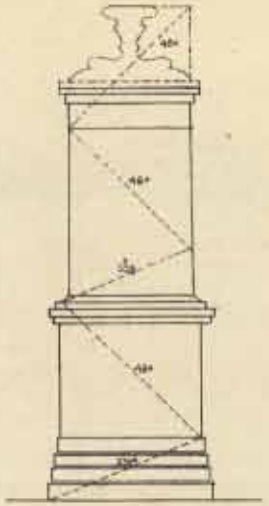
LINES A. B. C. AND ARC D DEFINE HEIGHT OF COL.ᴺ
– E. F FIX LEVEL OF PED.ᵀ APEX
POINT G. GIVES CENTRE OF PED.ᵀ ARC.

TEMPLE OF MINERVA POLIAS PRIENE

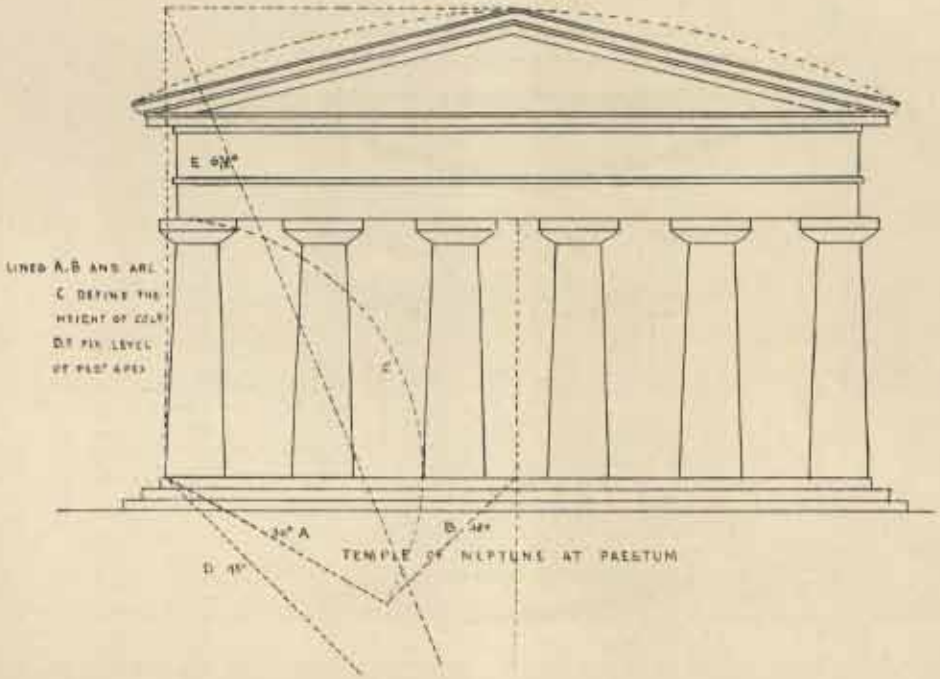


LINES A. B AND ARC C DEFINE HEIGHT OF COL.ᴺ
LINE D FIXES LEVEL OF PED.ᵀ APEX
POINT E GIVES CENTRE.ᵀ OF PED.ᵀ ARC.

TEMPLE ON THE ILISSUS

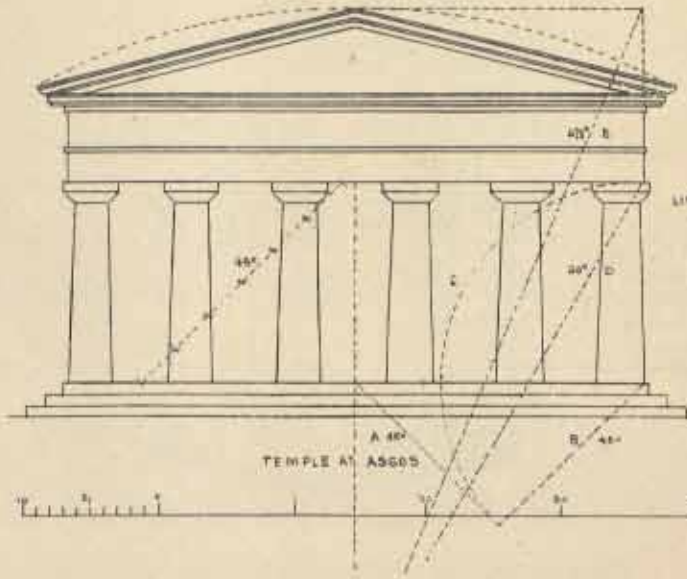


LYSITRATES MONUMENT



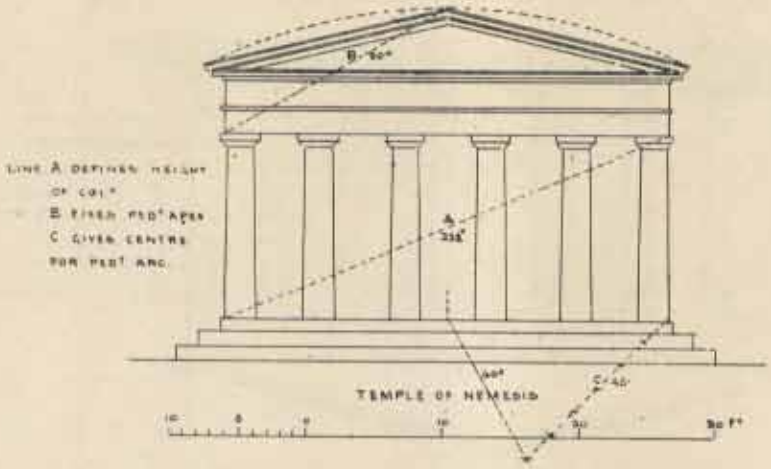
LINES A, B AND ARC C DEFINE THE HEIGHT OF COLS D E FIX LEVEL OF PED^T APEX

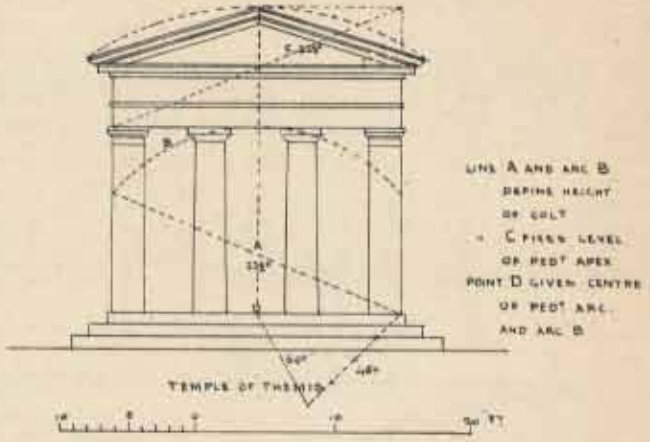
TEMPLE OF NEPTUNS AT PAESTUM

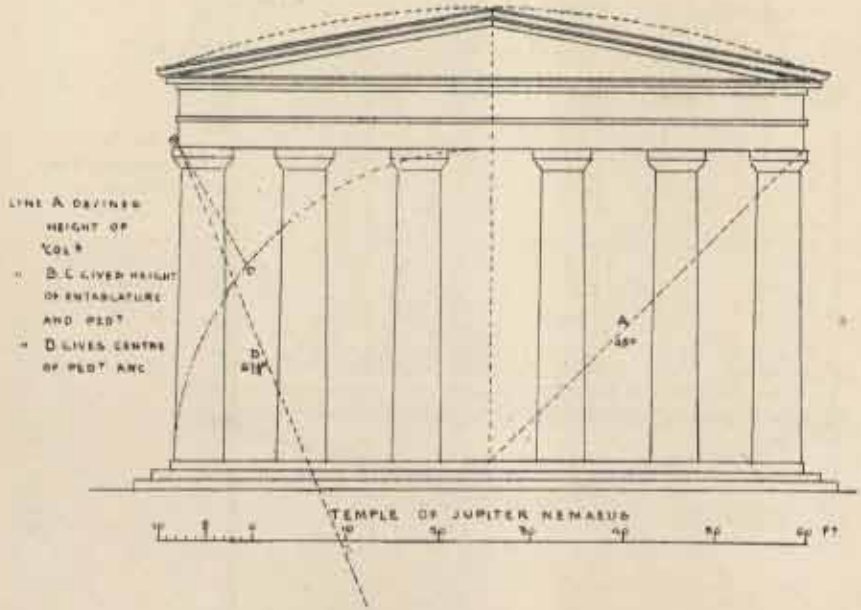


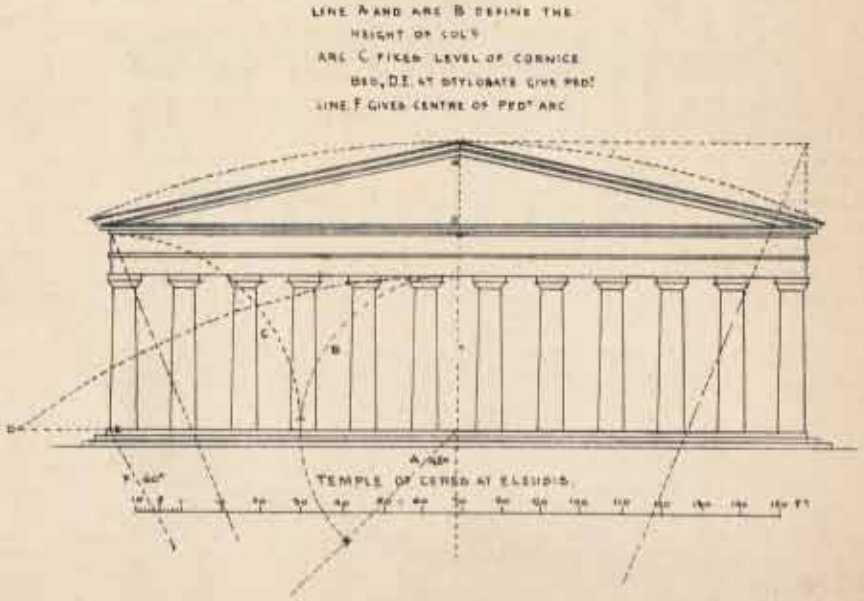
LINES A B AND ARC C DEFINE THE HEIGHT OF COL^S D E FIX THE LEVEL OF PED^T APEX

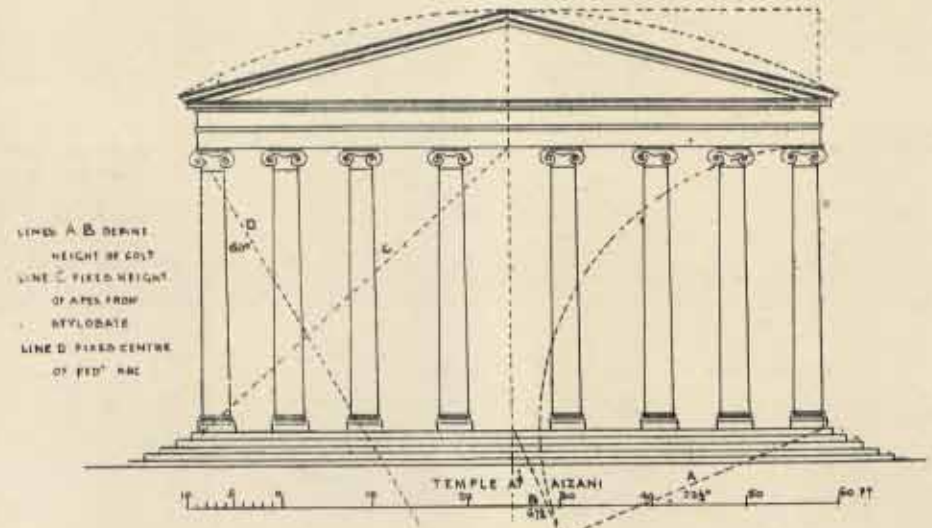
TEMPLE AT ASSOS

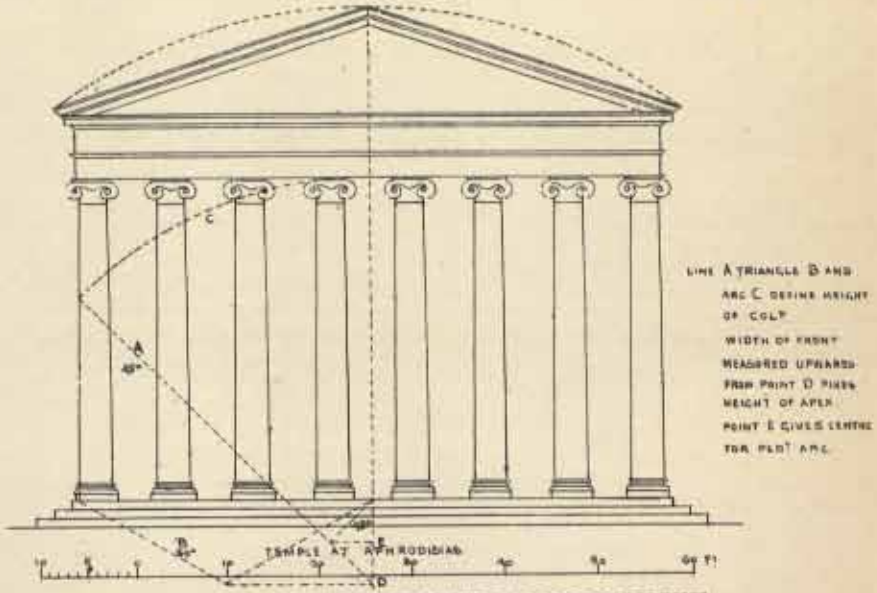

LINE A DEFINES HEIGHT OF COL^S
B FIXES PED^T APEX
C GIVES CENTRE FOR PED^T ARC
TEMPLE OF NEMESIS

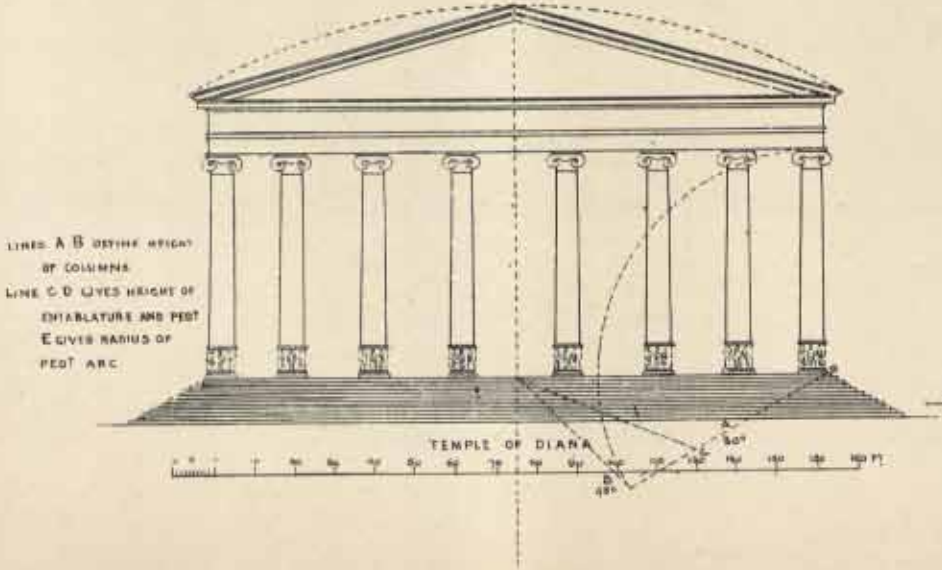

LINE A AND ARC B DEFINE HEIGHT OF COL^S
C FIXES LEVEL OF PED^T APEX
POINT D GIVES CENTRE OF PED^T ARC AND ARC B
TEMPLE OF THEMIS

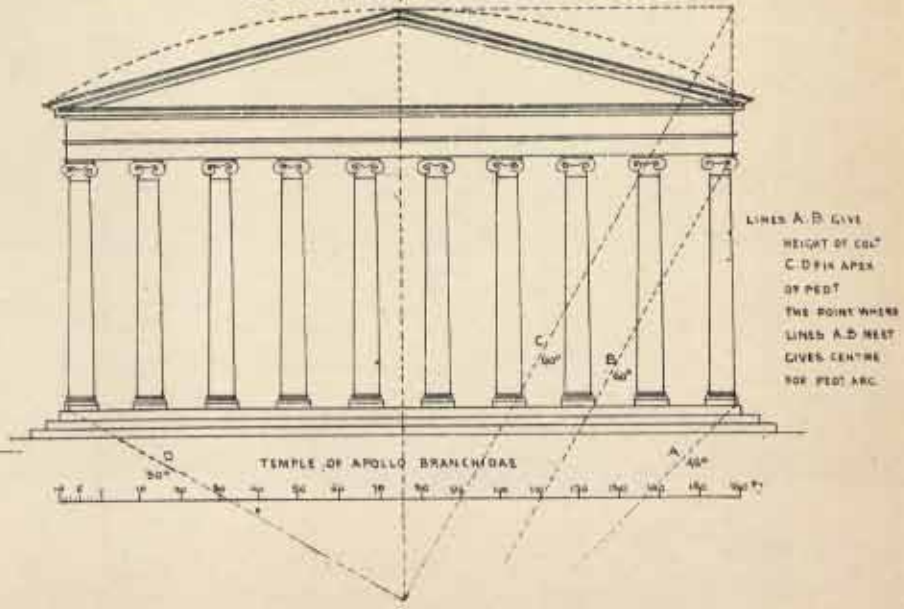

LINE A DEFINES HEIGHT OF COL^S
B C GIVES HEIGHT OF ENTABLATURE AND PED^T
D GIVES CENTRE OF PED^T ARC
TEMPLE OF JUPITER NEMAEUS


LINE A AND ARC B DEFINE THE HEIGHT OF COL^S
ARC C FIXES LEVEL OF CORNICE
BEG, D.E. AT STYLOBATE GIVE PED^T
LINE F GIVES CENTRE OF PED^T ARC
TEMPLE OF CERES AT ELEUSIS



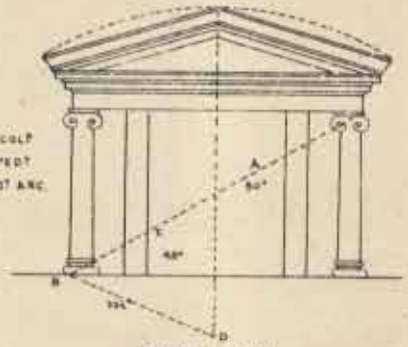




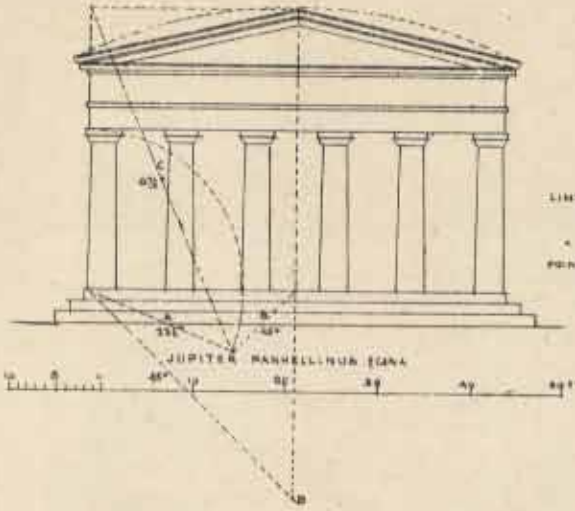


E.P. HELL & SON, PHOTO-LITHO, HEADINGTON

LINE A DEFINES HEIGHT OF COLP
B. C GIVES HEIGHT OF PED^T
POINT D GIVES CENTRE OF PED^T ARC.



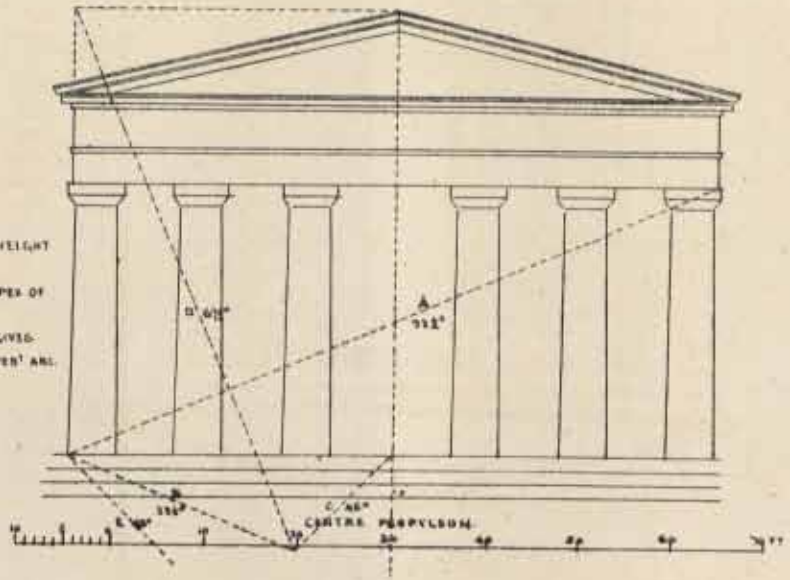
TOMB AT MYRA.



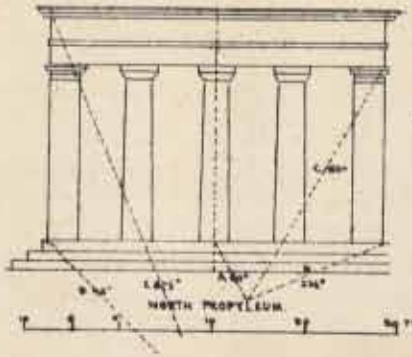
LINES A.B DEFINE HEIGHT OF COLUMNS
" C FIXES APEX OF PED^T
POINT D GIVES CENTRE FOR PED^T ARC.

JUPITER PANHELLENIUS ÆGINA

LINE A DEFINES HEIGHT OF COLP
LINES B. C. D FIX APEX OF PED^T
LINE E PRODUCED GIVES CENTRE FOR PED^T ARC.



CENTRE PROPYLEUM.



LINES A.B.C. DEFINE HEIGHT OF COLP
" D.E. FIX TOP OF CORNICE.

NORTH PROPYLEUM.

67½° passing downwards from the stylobate. Of the remaining ten, six are formed by combined arcs and straight lines forming angles of 60°, 45° and 22½°.

As to the mode of determining the heights of the entablature and pediment, some have been fixed by the very simple method of running up an angle of 45° from the middle of the column diagonal as at the Theseum, and three other temples; or, as in the case of the north portico of the Erechtheum by passing up an angle of 22½° to the centre, and from that upwards another of 60°; this being done defines the height of the pediment and the entablature: the only remaining step is to find the centre of the pedimental arc, the radius of which, as a rule, is equal to the length of the main diagonal; but sometimes a special centre has to be found for it, as in the instance of the temple on the Ilissus, where an angle of 30° from the stylobate to the middle of the front gives that centre.

The diameters of the columns, too, are fixed, as in the Parthenon, by passing a line at an angle of 45° between the stylobate and the soffit of the entablature, and dividing it into eight parts as equivalent to the number of columns; or, as in Theseus, using an angle of 60° divided into six parts as equal to the number of its columns.

In other cases angles of 45° or 22½° drawn downwards, intersected by other angles of the series and divided accordingly, give the diameter, as at Sunium, Nemesis, Themis, Segesta Assos and the east portico of the Erechtheum.

The height of the Parthenon stylobate is found by the intersection of a 30° line from the centre of the 22½° diagonal intersected at the foot by a line of 60°, and of Theseus by a similar intersection with an angle of 45° at the foot instead of 60°, and no doubt the other stylobates could be fixed by a corresponding method.

Then the slopes of the pediments are determined with equal facility by outlining them with arcs of circles. In the instances of both the Parthenon and the Theseum the radii of their arcs correspond with the diagonals of the entire fronts, and this is the case with the majority of the other temples we are investigating. The hitherto unconsidered angle of 15° is applicable to the slopes of Priene, Selinus, Aisani, Diana and Branchidæ.

If the above analysis be correct, then it would appear that the architect of the period, who had very little variety of form to work upon, must in his endeavour to secure diversity have used varying angles and methods.

If his building was to be on level ground like the Theseum he would find an angle of 22½° sufficient for the columnar, and 30° for the upper part; but if, like Sunium, it stood on a hill, he would employ angles which gave these parts greater elevation, and no doubt the site had much to do in determining which of the several available systems was to be followed.

We conclude with a reference to the two representations of the Parthenon: one showing the filling in with straight-lined geometrical figures, and the other of curvilinear figures. All the other façades are resolvable into straight-lined forms showing they are founded upon a geometrical basis, though this does not guarantee agreeable proportion in every case, as may be seen from the examples of the Doric at Selinus and the Ionic at Aphrodisias.

I hope you have not thought that I invited you to spend an evening in listening to a dilettante disquisition on classic architecture without seeking to draw some lessons from it for present use. We will not be called upon to design Greek temples, nor would we care to do so; but it is only due to the memory of the designers to realise that their buildings have the qualities of excellent proportion and of concern for varying forms of site—considerations we shall never be able to do without. There is special need to recognise this at the present time when in so many modern phases of architecture some are more inclined to the quaint and picturesque than the graceful and well-proportioned. There is a place for both as meeting the varying moods of the human mind, and we shall always have them with us, only instead of copying implicitly what

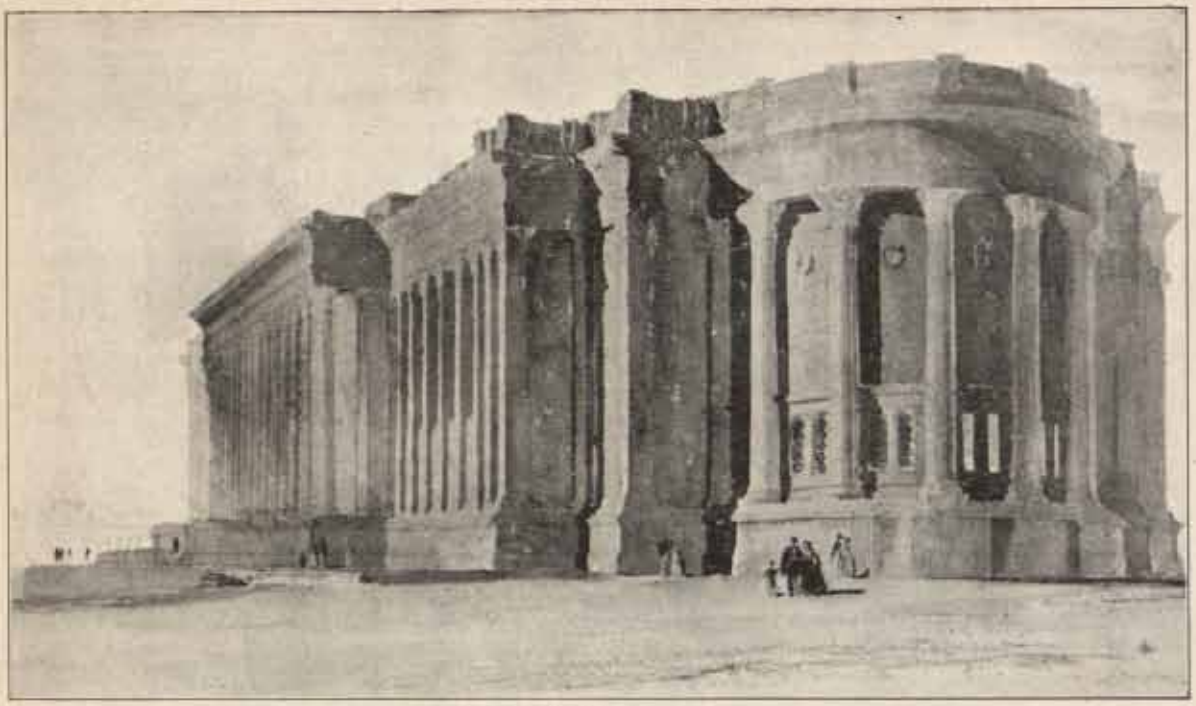
has been done in the past we ought to have some regard to evolution and progress in architecture and aim at doing better than the old-time work, and this is quite possible without ignoring the fundamental principles on which that work was done—proportion among the rest, for the observance of which we owe the Greeks a debt of gratitude, and this we may best discharge by recognising it as an essential factor in modern design although we may not consider it expedient to copy the Greek forms in which it is found.

All modern work should be regulated by some system or method; attention to this would help towards successful acoustics in public buildings. Of this we have an excellent illustration in the Free Trade Hall of Manchester, where the geometrical laws which we have been trying to elicit from Greek architecture find a place in the sections of that building so famous for great oratory and fine music. Its longitudinal section is defined by an angle of $22\frac{1}{2}°$, and its transverse by angles of 45° and $67\frac{1}{2}°$ combined in the same manner as those of the temple of Apollo Didymaeus.

I should add that the Greek buildings chosen for examination are situated in Greece, Asia Minor, and Sicily, and although in many cases incomplete, the columnar façades can always be determined by the columns standing erect *in situ* with so much of the entablature; or if fallen, the lengths of the columns are usually discoverable and also fragments of the entablatures. The pediments are largely conjectural, and the authorities from whose works the drawings have been made are Stuart and Revett, the publications of the Society of Dilettanti, including those of Mr. Penrose, of Mr. Pennethorne on The Geometry and Optics of Ancient Architecture, and of Messrs. Koldewey and Puchstein.



PAESTUM: TEMPLE OF NEPTUNE.



ST. GEORGE'S HALL, LIVERPOOL.
From an original sketch by Elmes in the Institute Collection.

THE INSTITUTE COLLECTIONS:

EXHIBITION OF SOME PAST MASTERS IN ARCHITECTURE.

By WALTER MILLARD [*A.*]

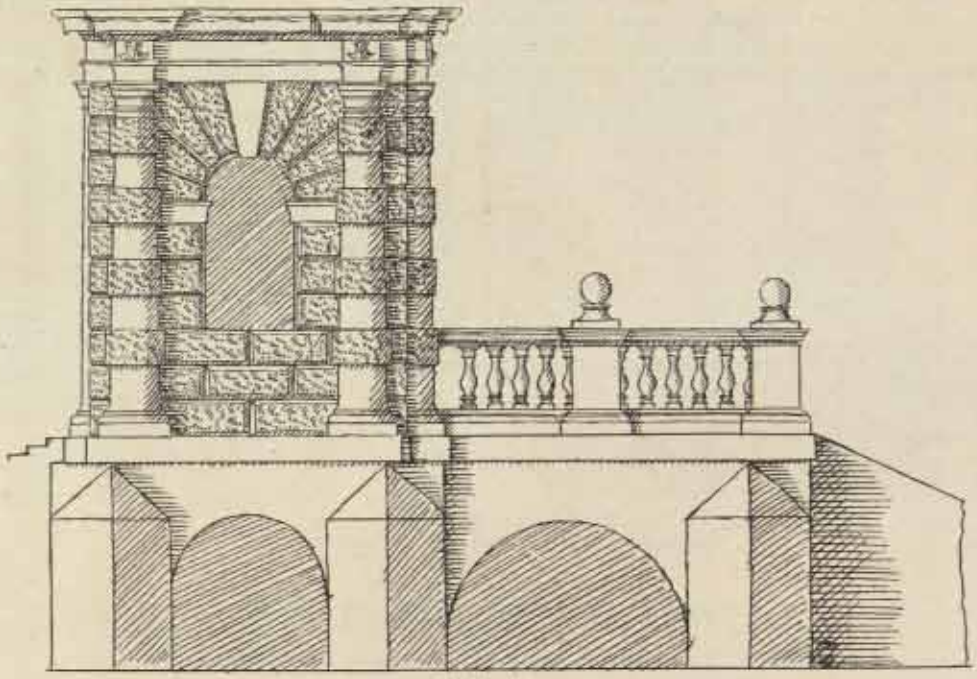
BY a fortunate inspiration, and at a given word, the drawers and cupboards and the portfolios of the Institute Library were made to yield up some of their precious contents for the entertainment and edification of the President's guests on the occasion of his "At Home" on the evening of Monday, 30th May. Mr. Dircks, in making a judicious selection from the rich stores in his keeping as Librarian, produced a whole series of architects' own drawings, works ranging from Inigo Jones down to men who have been personally known to many of us. Then, with thoughtful foresight and thoroughness, he took care to provide us with a handy catalogue, to serve at once as an aid to our appreciation of the works on view and to stand for a record of the evening's show. This catalogue is entitled *Selection of Original Drawings from the R.I.B.A. Collection*; and a note inside the cover states that the exhibition "is confined to original works which possess either an historic or pictorial interest." These sheets of varied size and hue, stained and faded and creased, possess furthermore a living, personal interest for us architects of to-day; they speak of the kinship between us and the men who have gone before.

Beginning with Inigo Jones, whose portrait in pen-and-ink, presumably by his own hand, looks out at us expressively from its frame, we at once encounter his signature on a "Design for gateway." Specially interesting is his sheet of drawings bearing the inscription, "Ground plat and upright of ye watergate Yorke house 1641," showing how this structure, which to-day we see rising out of an apparent depression in the ground, was designed, and doubtless built, to be borne up over the water on a vaulted basement-stage with a broad flight of nineteen steps leading down from the balustraded terrace, facing the river, planned out in front of the gateway itself.

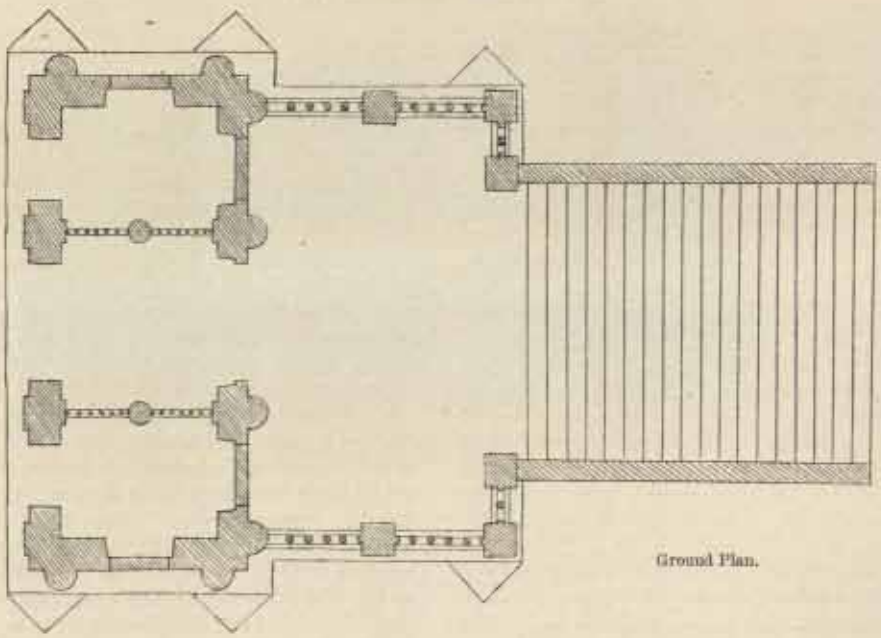
A very freely handled sketch of Inigo Jones's for a rather ornate mantelpiece, on which is written, "for Greenwich," contrasts effectively with four careful scale-drawings, with dimensions figured on, inscribed respectively, "For the withdrawing room to the Bedchamber in the lower story at Drayton, 1653. John Webb"; "For ye Bedchamber in ye ground story at Drayton. 1653. John Webb"; "Sr George Pratt his guest chamber"; "ffor the chimney peece in the withdrawing room at Northumberland House. 1660.

John Webb." In these elegant studies for mantelpieces Webb shows himself a not unworthy follower of his master, but lacking his fire and force. That scrap of indirect evidence, by the way, on Jones's sketch, in his own handwriting, might have weighed for something with Fergusson when he wrote: "The design of the river façade of Greenwich Hospital is almost always said to be his, without a shadow of documentary evidence."

An elevation of a façade at Vicenza of the Palazzo Chiericati, by Palladio, of two Orders in height, reminds one of so much one sees that has



Side Elevation.



Ground Plan.

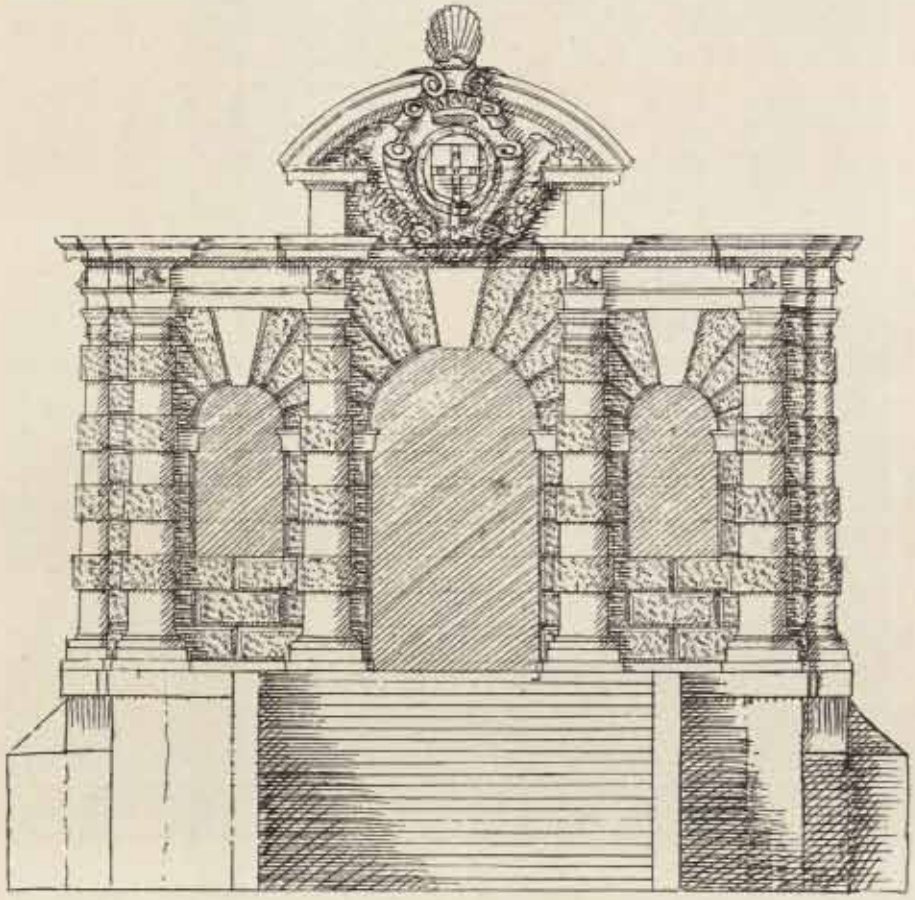
THE WATER GATE, YORK HOUSE.

From the original drawings by Inigo Jones in the Institute Collection.

been done since. A busy-looking sheet of drawing, full of sprawling figures interspersed with written notes about them, is inscribed by Professor Donaldson, "a good illustration of the treatment of Sir James Thornhill of a staircase after the Italian manner"; much as might be said of any of us, fancying ourselves designing and drawing after—say—the French or some such grand manner, rather than trying to do the best we happen to be capable of without aping other manners.

by the same hand, is similarly figured-up and carefully detailed, with a good deal of the carved ornament sketched in.

On a working drawing for a timber-framed cupola, shown in elevation and section with plans at various levels, Professor Donaldson, the donor, has written: "This appears to me to be an original drawing of Sir Christopher Wren's. The handwriting—the style of drawing—the prospective language of the marginal note below, indicates

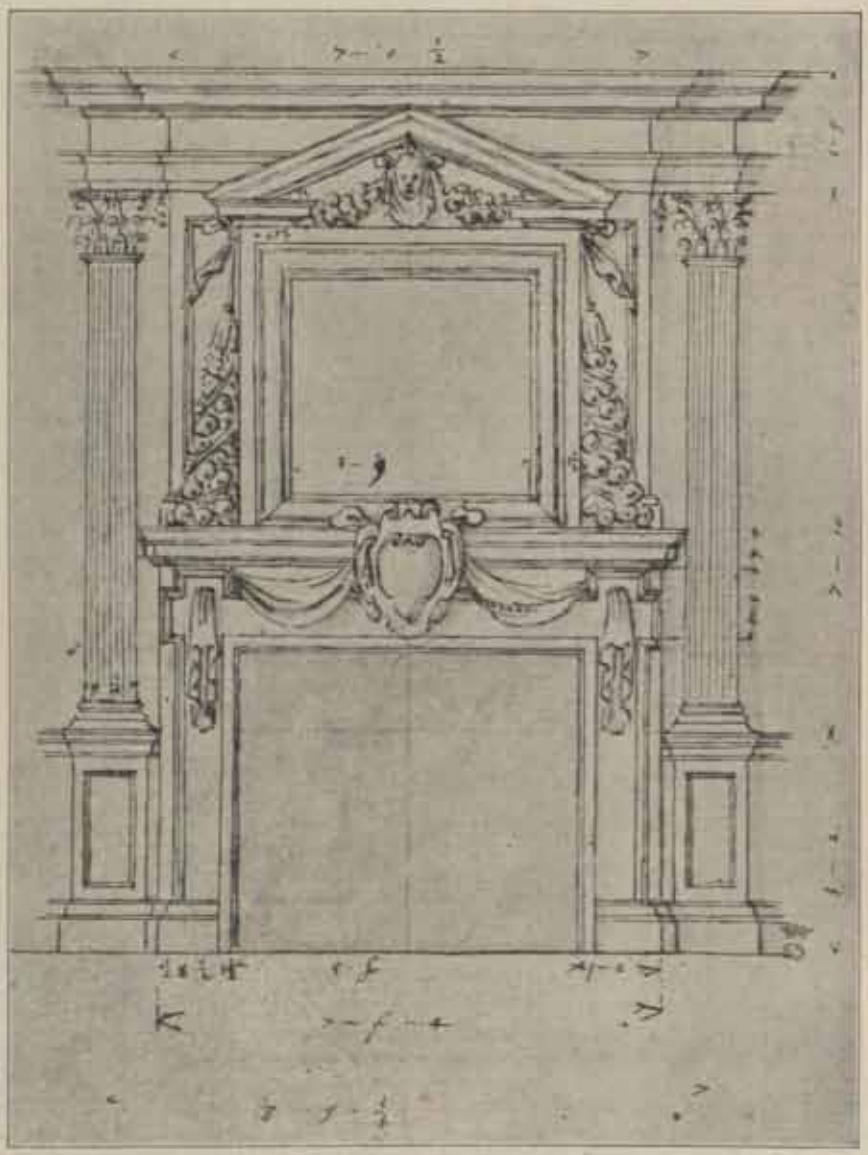


THE WATER GATE, YORK HOUSE: RIVER FRONT.
From the original drawing by Inigo Jones in the Institute Collection.

On the outer margin of a mounted drawing, showing, among other things, half the façade of a palace, is written, "the original drawing of Scamozzi papa Gulio near Rome." This is clearly an architectural student's measured-drawing made from the actual building, since it has the leading dimensions carefully figured on, and lettered sketches of the details are given alongside, just as a travelling-student in architecture would do. This student economised paper by filling the sheet on both sides with a variety of subjects. The subject of another sheet of measured work, evidently

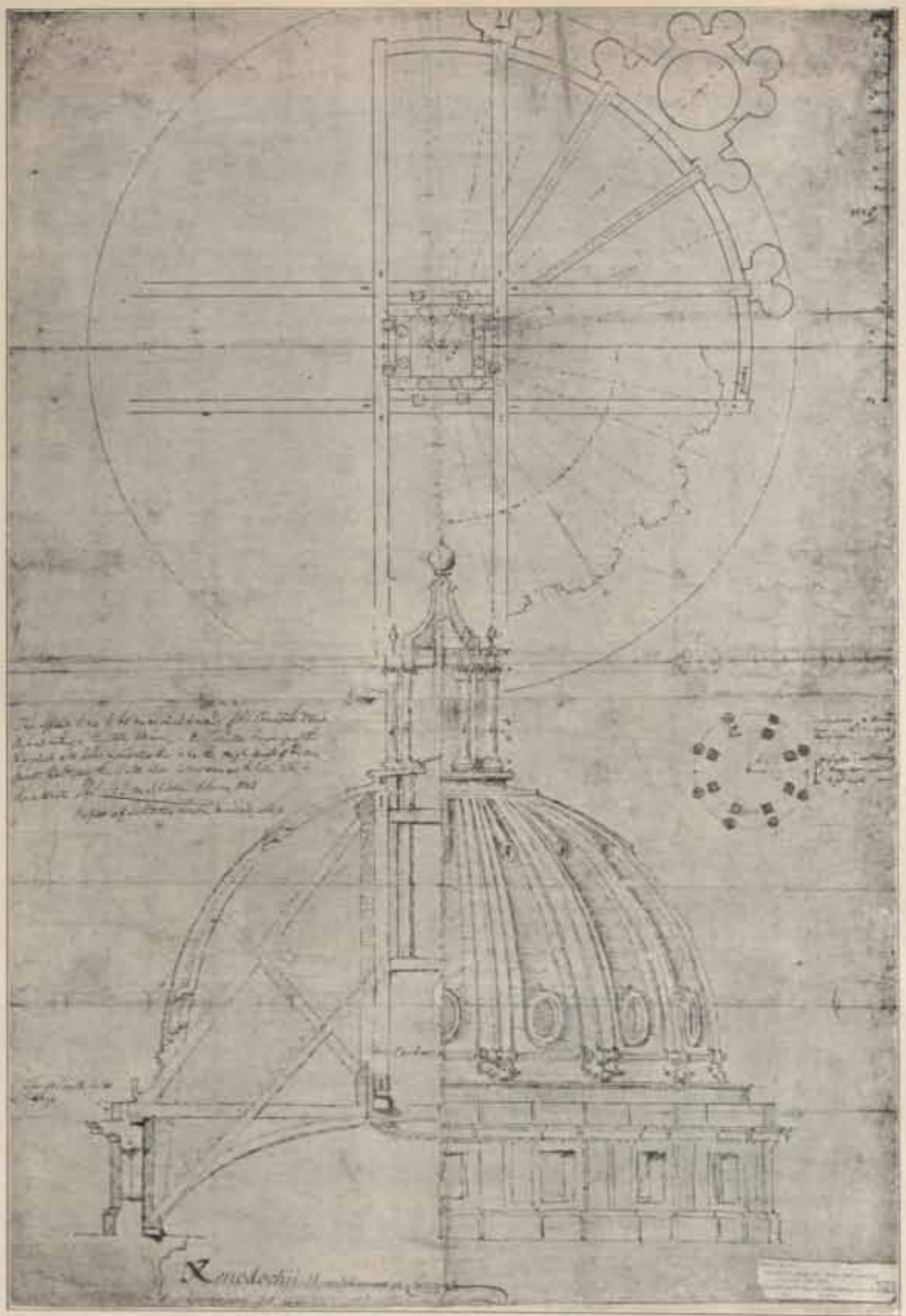
this to be the rough draft of his own master hand; and the date also is curious and the Latin title is characteristic." The marginal note referred to runs: "The plinth is to be a drip"—meaning a gutter, apparently—whilst the title reads: "Xenodochii Hemispherium et Laterna. Grenwican Feb. 1702." However closely this drawing may answer to the Professor's description of it, as a rough draft, it seems to be nearly all that would be needed for the execution of the work—by workmen who knew their trade. It is noticeable that, although the scantlings are not figured on the

clearly drawn timbers, yet dimensions are carefully written to the lantern, giving heights and diameters of columns, &c. The designer seems to have deemed it a matter of consequence to get the a Section, entitled "Sir Christopher Wren's . Design . for . S. . Paul's . Cathedral . measured from the model and drawn at one eighth of its scale. E. C. Sayer." These drawings are dated respectively

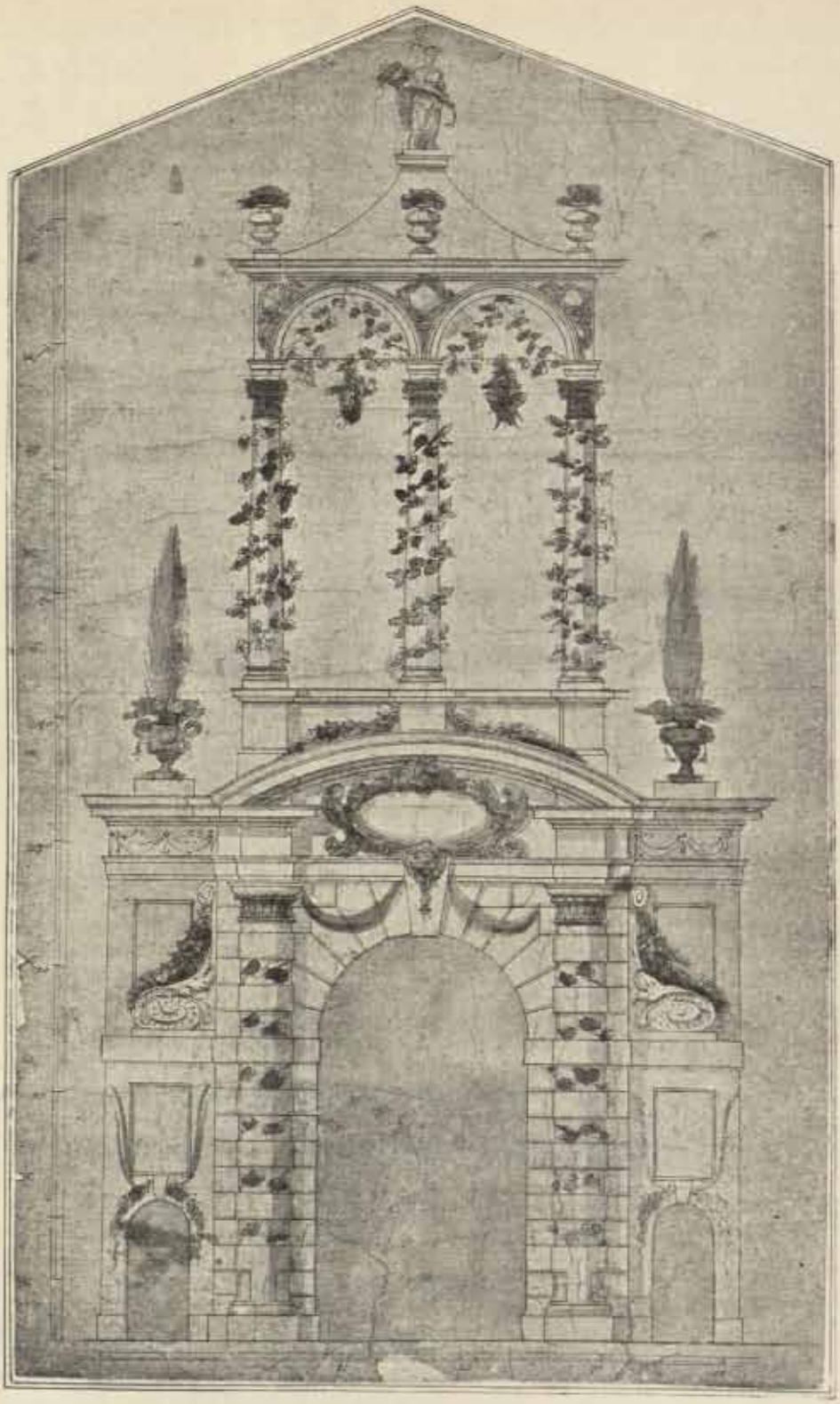


DESIGN FOR MANTELPIECE BY JOHN WEBB, INSCRIBED "FOR KING CHARLES THE 2ND HIS GUEST CHAMBER."
From the original drawing (dated 1660) by John Webb in the Institute Collection.

shapes and proportions of this crowning feature just to his mind. The carpenters could be trusted to frame their roof from the scale-drawing; what they were not to be entrusted with, without exact sizes, was the architecture. A greater work of Wren's comes next, illustrated by an Elevation and "1846" and "1847." They represent, of course, the earlier design, that was not carried out. One may observe that, according to this representation, the scheme provided for top-lighting of the domed compartments surrounding the main, central area. The unity of effect to be obtained by top-lighting



GREENWICH HOSPITAL: DOME, HALF-SECTIONAL ELEVATION, AND PLAN.
From a drawing in the Institute Collection, attributed by Donaldson to Sir Christopher Wren.



TRIUMPHAL ARCH ERECTED NEAR WHITEFRIARS, FLEET STREET, FOR THE ENTRY OF KING CHARLES II. INTO LONDON ON HIS RESTORATION 22ND APRIL 1661.

From the original drawing in the Institute Collection.

alone would here have been missed, owing to low cross-lighting from the side windows shown. More than a century later the complete effect of top-lighting in a large church of classical design was well exemplified in the Madeleine, Paris, where no disturbing side-lights weaken the impressiveness of the architecture seen under illumination only from above.

Four drawings, by an unknown hand, "of Triumphal arches erected for the entry of King Charles II. into London on his restoration, April 22, 1661" represent respectively: the arch in Leadenhall Street, commemorating "Monarchy Restored"; another near the Royal Exchange, commemorating "Loyalty Restored"; one near Wood Street, Cheapside, erected as a "Temple of Concord"; and one near Whitefriars, in Fleet Street, illustrating a "Garden of Plenty." It is in this last that the spirit of the occasion seems to have been best caught and rendered. Put into perspective, this design would surely be a fascinating one for its purpose. All four show a mastery of architectural composition and skill in its presentment. The question of the authorship of these designs is one of standing interest. Were they by Webb, or could it have been young Wren who produced them?

In a frame of skilfully tinted drawings, for parts of Somerset House, by Sir Wm. Chambers, we were shown architecture thoughtfully designed and detailed, with exact dimensions figured, evidently in view of the execution of the work. Alongside these hung another tinted drawing, no less deftly executed, headed, "Façade Principalle du Pavillon de Bains, Erigée à Paris a L'Hotel de Brancas, Pour Mr. le Comte de Lauraguais en l'anné 1768, sur les dessins de Berlanger architecte des menûs: Plaisirs du Roy." At the foot is this note: "Dedié a monsieur Williams Chambers: par son tres humble serviteur Belanger"; an early instance of *l'entente cordiale*!

Drawings by Sir G. G. Scott and Wm. Burges brought us next right down to days and to men within the memory of many of us. Sketches in Egypt by Owen Jones, and originals of illustrations in the works of M. Choisy and the Comte de Vogüé might be contrasted with drawings by James Stuart, of Remains in Greece. Designs by Cockerell, Elmes, and Decimus Burton were appropriately hung side by side; and rightly included in the catalogue was the remarkably fine Sectional Drawing through the dome and transepts of St. Peter's at Rome, by John Goldicutt, 1818, which adorns the Front Library. Elmes's tender and telling little sketch for St. George's Hall, Liverpool, shows the hand and reveals the mind of the master.

The vigorous personality of our former Secretary, William H. White, was recalled to us by a few strong sketches, from France and Belgium, hung in the old Council Room; where also was found an interesting series of small drawings illustrating old domestic building-work in this country, by W. Peart; and a fine set of most valuable sketches of painted decorations and figures from church roofs and screens in the Eastern Counties, by George Young Wardle. Genoese palaces received illustration in a collection of careful measured-drawings by D. Mocatta, 1828; whilst a selection of Italian door-knockers was displayed in some highly finished pencillings by A. Lippitsch.

A final touch of personal interest, for many members, was given by the "Perspective View of Design for the New Law Courts," by Alfred Waterhouse, shown in a large and striking drawing, in colour, from his own hand—a veritable autograph.

Besides the drawings displayed round the walls, there were laid out for inspection numerous volumes and portfolios containing sketches and mounted drawings. To these many of the guests proved to be specially attracted; and small wonder, seeing that in this collection were comprised original sketches by Andrea Palladio, Sir Wm. Chambers, James Stuart, T. L. Donaldson, J. Goldicutt, Chas. Texier, A. Pugin, Wm. Burges, Eden Nesfield, R. J. Johnson, Geo. Devey, and Wm. Simpson.

Altogether, this little, unadvertised exhibition of architects' accomplishment as draughtsmen and students of architecture seemed to mark by no means unfittingly the close of the series of pleasant reunions to which we have been so hospitably bidden by our President—himself a master draughtsman and lifelong student of architecture.

It sets one dreaming that some day there may yet be arranged, at the headquarters of British architecture, a continuous exhibition of the handiwork of past masters of our profession and of students in it; an exhibition parallel, in its way, to those held in the public galleries attached to our national collections of prints and drawings at Bloomsbury and South Kensington; where a periodically changing series of works may be displayed for the edification of present-day masters and students. The delineation of architecture, though it count but as an accomplishment, may nevertheless prove to be a not altogether negligible quantity in that delicate process—the moulding of the architect.

CAMPBELL DOUGLAS [*F.*]: A MEMOIR.

By A. N. Paterson, M.A. [*F.*].

Through the death, on the 14th April, of Mr. Campbell Douglas, there passed away the respected *doyen* of the profession in Glasgow at the advanced age of eighty-two.

Born in the year 1828, he entered on his apprenticeship to architecture in 1842; till within the last two or three years more or less actively engaged in the work, and to the end, though but nominally in practice, still alert in his interest in what was being done, he had thus an honourable connection of nearly seventy years' duration with the "Mistress Art."

After a general education received partly at home under his father, parish minister of Kilbarchan, Ayrshire (he "came out" with his family and congregation at the Disruption which gave birth to the Free Church in 1843), and partly at the University of Glasgow, he received his first training in architecture in the office of Mr. J. T. Rochhead, at that time the leading architect in Glasgow and author of many notable works there and throughout Scotland. Five years' apprenticeship with him was followed by some eight or more spent in gaining further knowledge and experience as draughtsman in various offices in Durham, Liverpool, and Brighton, after which Mr. Douglas finally returned to Glasgow to settle down to practise on his own account in 1856.

Commissions soon came to him, for in 1859 he was already engaged, along with smaller works, on the design of a mansion house of considerable importance—Hartfield, Cove, overlooking the Firth of Clyde, built for the late David Richardson and now one of the residences of Lord Inverclyde. It is a good specimen of the Scottish baronial style, effective in composition, and well suited to its situation between hill and loch.

In 1860 a partnership was entered into with the late Mr. J. J. Stevenson, at that time an assistant in the office, which during the nine years it lasted was productive of much good work. Kelvinside Free Church, understood to be mainly Stevenson's, which was dedicated in 1863, is a fine design in Italian Gothic with a detached campanile, and was followed almost immediately by Townhead parish church, of equal importance, designed principally by Campbell Douglas, under the influence of French thirteenth-century work. Other churches of this period or following shortly on it were Queen's Park Established, Claremont Street Wesleyan, and Free St. Enoch's, the last an interesting and successful plan for an awkward site occupying an acute angle between two streets, and having a lofty tower finished with an open crown after the manner of St. Giles's Cathedral, Edinburgh, and St. Nicholas, Newcastle. Other works of importance then in hand were Kiel House, Campbelltown, for Mr. James Nicol Fleming, but carried out later on a much enlarged scale; Westoe, South Shields, 1864, for Mr. J. C. Stevenson, a large brick mansion under the prevailing influence of the Gothic revival; and Kirkland, Edinburgh, 1867, for Mr. Constable, a house in the later Scottish Domestic style, of restrained and excellent character.

In the later years of the Campbell Douglas and Stevenson partnership another influence on the work produced begins to be felt, combined with that of the principals. In 1869 or 1870 Mr. Stevenson left to take up practice in London; in the latter year a competition was initiated for an important fountain in Kelvingrove Park, Glasgow, to commemorate the introduction of the city's water supply from Loch Katrine, in which the successful design was that of James Sellars, then draughtsman with the firm, but, shortly after Mr. Stevenson's departure for the south, assumed by Mr. Douglas as partner in his stead.

At this time, 1872–3, a work of the first importance was already in hand. The St. Andrew's Halls, Glasgow, the scheme of which comprised one of the largest and finest concert halls in the country, a ball-room suite, and several smaller halls of varying dimensions, had been carried as far as the sketch plans by Mr. John Cunningham, C.E., of Liverpool, and designer of the Philharmonic Hall there; but he having died before further progress was made, the work was handed over by the promoters to Mr. Douglas to execute. It has been described by one who was in the office at the time as the work of Mr. Sellars's "fertile brain and facile pencil," but from what has been said above, together with the internal evidence of the working drawings which bear many notes in Mr. Douglas's hand, it may be fairly held that, if the detailing is characteristic of the younger man at his best, Mr. Douglas and Mr. Cunningham also are entitled to share in the credit of this fine work of architecture.

A similar attitude is only reasonable regarding the responsibility for the work which followed during the fifteen years of the Campbell Douglas and Sellars partnership, even though the buildings themselves in most instances bear evidence of the predominating influence in design of the junior partner. It was a period of extraordinary activity and success. Public and commercial buildings, churches, schools, hospitals, and private houses were produced in such numbers as to prohibit the inclusion in an article such as this of even the barest catalogue. A few outstanding examples may be mentioned: in the first category, the Bank of Scotland buildings, the Scottish Amicable Insurance Company's offices, and those of the *Glasgow Herald*, Messrs. Wylie & Lochhead's warehouse, and the club house for the New Club—all in Glasgow; with town halls in Ayr, Campbelltown, Dysart, and Sinclairtown. Among churches, of which Mr. Douglas was author with one or other of his partners to the number of fifty-three, the more notable at this period were Blackfriars, Hill-

head, Burnbank, Belhaven, Queen's Park, Anderston, in various districts of Glasgow; St. Andrew's Free in Edinburgh, Free Abbey in Dunfermline, with others as far distant as Bournemouth, Hampstead, and Londonderry. Of schools there were several for the Glasgow and other school boards, Kelvinside Academy, an important proprietary institution, and Spiers' School, Beith; of hospitals, the Victoria Infirmary, and Sick Children's Hospital in Glasgow, a cottage hospital at Langholm, and mission hospitals at Safed and Tiberias in Syria; of important private houses, Mugdock Castle, Bullionfield, Dundee, Auchenheglish, Loch Lomond, Netherhall, Largs (the seat of the late Lord Kelvin), Doonholme, Ayrshire, and others.

For several of the churches, in particular, Mr. Douglas may be regarded as mainly, if not solely, responsible. Of these were Blackfriars, with twin truncated towers (one only carried to completion), which was designed by him after studying Paderborn and other old Romanesque buildings in North Germany in 1872–3; St. Andrew's, Drumsheugh Gardens, Edinburgh, a fine Renaissance building on a difficult site, consorting with and at the same time dominating, as a Gothic design would not have done, the tall houses on either hand; and the Free church at Dysart, on simple Gothic lines with a central tower and three semi-circular-ended apses, an admirable example of a village church, and well in keeping with those earlier ones which give charm to an architectural tour through the little towns of the Fifeshire coast.

The finely conceived buildings for the Glasgow International Exhibition of 1888 were solely the work of Mr. Sellars, Mr. Douglas having been laid aside at that time by a protracted illness; they are mentioned here as having been the main cause, through overstrain, of that brilliant architect's premature death, which occurred in the same year.

Shortly afterwards Mr. Douglas, recovered in health but feeling the effect of advancing years, took in Mr. Alex. Morrison, one of his senior draughtsmen, as partner. The work which followed was neither so extensive as, nor of equal quality to, that of the previous period, but it included the second section of the Victoria Infirmary, another important school for the Glasgow Board, the Free Public Library, Ayr, church and hall at Milngavie, Sandeman Library, Perth, Cowan Institute, Penicuik, and the Infectious Diseases Hospital at Kirkcaldy among other buildings of importance.

This partnership Mr. Douglas found it necessary to dissolve, and for several years he continued alone until, in 1903, his business was conjoined with that of the writer, an arrangement which subsisted until his death. Though keenly interested in all that was being done, and always ready to assist as friendly mentor and critic, Mr. Douglas from this time took little part in the management or design of the works in hand except as regards one or two of minor importance in which he had a personal interest. In 1906 he had a recurrence of his previous illness, and in the following year went to live quietly in Edinburgh.

Then for the first time was severed his long connection with No. 266 St. Vincent Street, a house which he acquired in the early days of the Stevenson partnership, and in which, after the older fashion now so seldom followed, the head and his family occupied the upper flats as a dwelling house, while the ground floor, with an extension over the back garden, served (as it still does) as office for the staff, which was regarded in turn as but a larger family.

Of the assistants in those earlier days not a few have since become prominent in the architectural world; of such (in addition to the three first partners, all trained in the office) were B. J. Talbert and J. M. Brydon, who passed away before their old chief; William Leiper, William Flockhart, Washington Browne, William Wallace, F. W. Troup, John Keppie, William Ferguson, William Ross, and others perhaps not less deserving, if less widely known, and all still happily to the fore. To several of these I am indebted for assistance in preparing this short memoir.

If the cross-currents in the work done during the various partnerships render it difficult to appraise with exactness the quality and performance of Campbell Douglas as an architect, not so is it with regard to his character as a man. Honourable, courteous, kindly throughout life, with a keen and delightful fund of humour, a fine appreciation of beauty in art and nature, and a warm interest in the work and methods of the younger generation, he held the affection and respect of all who came in contact with him. From Mr. Flockhart's kindly communicated recollections of his engagement as assistant for some years during the seventies, I venture to quote the following lines:—"No one could be in Mr. Douglas's office without benefiting by the broad-minded generosity of his nature, and I have a very pleasant recollection of the musical At-Homes which he had, and to which his assistants were always asked. He had a hearty joyous nature which enabled him to hold things with so light a hand that the work of the office seemed to go on with a sensation of ease and pleasure which one appreciates more as one goes on in life."

In these later years of advancing age, the entertainment "up-stairs" was naturally of a less lively nature, but the kindly heartiness prevailed as of old, and I, for my part, am not likely to forget the courteous welcome received, the warm-hearted interest expressed by him and the gracious and talented lady who so fully shared his life, and now mourns his loss.

Mr. Douglas, it may be added, was made a Fellow of the Royal Institute in 1879, and was for four years (1891–95) one of its Vice-Presidents. He was an original member of the Glasgow Institute of Architects, which he joined in 1868, served

many years on its Council, and was for two terms President. He was a Justice of the Peace for Argyllshire, where he had his country house on the shores of Loch Goil, and was a member of the Philosophical Society of Glasgow and of the Ecclesiological Society, in the work of which he took a warm interest.

Mr. James A. Morris [*F.*], of Ayr, N.B., in a letter to the Editor of this JOURNAL, writes:—"Mr. Campbell Douglas was one of the kindliest and most genial of men—a man good to be met with, but better still to know. He held his own opinions strongly, yet still was always tolerant of the opinions of others. Absolutely reliable, and a good architect, he was highly esteemed; and although for some years he has been gradually passing into a quiet retirement, he carried with him the respect of his many friends, and any reference to his name always evoked friendly commendation and ready good-will."

REVIEWS.

"ZINC WHITE" *v.* "WHITE LEAD."

Oxide of Zinc, its nature, properties, and uses, with special reference to the making and application of paint. By J. Cruickshank Smith, B.Sc., F.C.S. Edited by Arthur Seymour Jennings. Lond. 1909. [*The Trades Publishing Co. Ltd.*]

This little handbook is published with the avowed object of promoting the use of "zinc-white" in preference to "white lead" in painting—presumably house-painting—and both author and editor are well-known advocates of its adoption in that practice.

The case is stated very clearly and fairly, and certainly without leaving untold the hygienic drawbacks to the manufacture and use of white lead. The latter has, however, been in use in this country for some 300 or 400 years, its use and properties are familiarly known, and the precautions necessary for the safety of those engaged in its manufacture and application are now understood; so that the dangers attending either are very greatly reduced. Forms of lead poisoning which were common seventy years ago among house-painters are now rare. I have known many hundred artisan painters and do not remember a case of "dropped hands"—the form of paralysis by lead poisoning formerly frequent. Cases of "painter's colic" occur from time to time, but if not neglected yield to treatment in a few days; with both it is a question of personal cleanliness—the invariable washing of hands after work and before taking food, and (it may be added) sobriety. As a rule, painters will be found a fine healthy set of men, as long-lived as other workmen where they have been properly trained. It is the casual untrained man, turned painter, who is apt to suffer. Washing has never been his strong point, and he is hard to convince of its necessity. I should certainly be sorry to see the prohibition of white lead in this country, for in our humid atmosphere I believe it to be the best protective material, as paint, that we yet have.

There is no doubt, however, of the value of oxide of zinc as a pigment, but it must be understood, and it must not be used as a chance substitute for white lead; above all, lead driers (in ordinary use with white lead) must not be used with it. The fact seems to be that it is on the use of specially prepared oils and driers that success in the use of zinc white largely depends (see p. 35). It has never been reckoned so good a "covering" paint nor so good a drying paint as white lead. Experimental trials, conducted with special care, may give satisfactory results; but in broad use I believe this to be true. Mr. Cruickshank Smith (in chap. iii.) goes into this matter, but it is evident that he has found that very skilled handling of the paint is necessary. In the previous chapter he appears to approve the admixture with oxide of zinc of other and inferior materials such as barytes and gypsum. But the permission for such admixtures, to which makers are already too prone, would be fatal to honest painting. If adopted at all it should only be at the wish of the client and under definite control.

Those interested in the subject will find in the handbook much information; but the reader who has practical experience of painting will be satisfied that, before specifying work to be painted in oxide of zinc, he should carefully study the details if he wishes to ensure success.

J. D. CRACE [*Hon. A.*].

CORRESPONDENCE.

GUILD OF ARCHITECTS' ASSISTANTS.

137 *Church Street, Edgware Road, W.:* 1*st June* 1910.

To the Editor JOURNAL R.I.B.A.

DEAR SIR,—The following letter has been addressed to *The Times* and seven other papers:—

"The Executive Council of the Guild of Architects' Assistants desires to call the attention of the public to the present overcrowded state of the architectural profession, and to warn parents of the inadvisability of placing their sons as pupils to the profession at the present juncture, unless they are fully satisfied of their ability, sufficiency of capital, and social position to form a practice of their own on completion of their articles, or that an official appointment of some kind is assured."

I feel sure that my fellow members of the Royal Institute will be gratified to know that something has been done to inform the public of the condition of our already overcrowded profession.

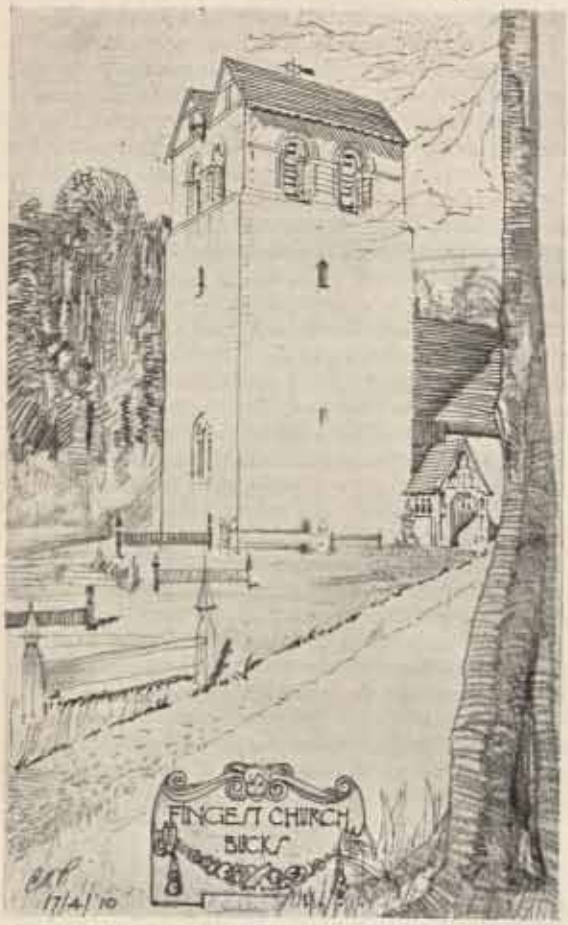
Yours truly,

ERNEST J. DIXON [*A.*].

FINGEST CHURCH, BUCKS.

The Church of Saint Bartholomew, Fingest, (locally pronounced with a soft " g ") stands at the head of the Hambleden valley about seven miles from Great Marlow. Seen across the valley the fine tower, with its curious double saddle-back roof, forms a striking feature.

The whole church has been thoroughly illustrated and described by Mr. W. A. Forsyth in Volume VIII. of the Records of Bucks. The Norman tower is of unusual size, being about 27 feet square out-



side and 8 feet wider than the nave. Its height is about 60 feet. The twin gables were added in the fourteenth century. The walls are built chiefly of flint with stone quoins and are rendered inside and outside. There is no staircase; access to the belfry is gained by ladders.

It is surprising to find that an Episcopal Palace of the Bishops of Lincoln, of which a few stones remain, once adjoined the churchyard. It is known from manuscripts in the Bodleian Library that several bishops of Lincoln resided here, and carried out their duties from this place, in the thirteenth and fourteenth centuries.

CECIL H. PERKINS [*A.*].

9 CONDUIT STREET, LONDON, W., 11*th June* 1910.

CHRONICLE.

Town Planning Conference.

The Town Planning Conference which, as announced in the last issue of the JOURNAL, has been postponed on account of the death of his late Majesty, will be held from October 10th to 15th next. The detailed programme will be issued as soon as possible. It may be mentioned that the President of the Local Government Board, Mr. John Burns, has kindly accepted the position of Hon. President of the Conference. The President is Mr. Leonard Stokes, *President-elect R.I.B.A.* Mr. John W. Simpson [*F.*] has been appointed Secretary-General, and all correspondence relating to the Conference should be addressed to him.

The President's " At Home."

The " At Home " given by the President in the rooms of the Institute on Monday, the 30th ult., was numerously attended, members being present from all parts of the country. Displayed on the walls of the Library and ranged on tables in volumes and portfolios was a large collection of original drawings forming part of the possessions of the Institute. The exhibition excited much interest, some of the drawings shown of the great masters being fresh even to those most at home among the Institute collections. Reproductions of a few of these illustrate the article which Mr. Walter Millard has very kindly contributed to the present issue [pp. 599–605].

The Annual Elections.

At the Business General Meeting of Monday, 6th inst., the Officers, Council, and Standing Committees for the ensuing Session were declared duly elected, in accordance with the Scrutineers' Report, as follows :—

THE COUNCIL.

President.—Leonard Stokes.

Past-Presidents.—Thomas Edward Collcutt; Ernest George.

Vice-Presidents.—Reginald Blomfield; Alfred William Stephens Cross; Edward Guy Dawber; Ernest Newton.

Hon. Secretary.—Henry Thomas Hare.

Representatives of Allied Societies.—Henry Clement Charlewood (Northern Architectural Association); John

Bennie Wilson (Glasgow Institute of Architects); Percy Scott Worthington (Manchester Society of Architects); William Morton Cowdell (Leicester and Leicestershire Society of Architects); Arthur Stansfeld Dixon (Birmingham Architectural Association); Robert Evans, jun. (Nottingham Architectural Society); Sydney Decimus Kitson (Leeds and Yorkshire Architectural Society); Arnold Thornely (Liverpool Architectural Society); John Watson (Edinburgh Architectural Association).

Members of Council.—Maurice Bingham Adams; John James Burnet; Walter Cave; Max Clarke; William Flockhart; William Adam Forsyth; James Sivewright Gibson; John Alfred Gotch; Edwin Thomas Hall; George Hubbard; Henry Vaughan Lanchester; Edwin Landseer Lutyens; A. Beresford Pite; Andrew Noble Prentice; Halsey Ralph Ricardo; Henry Heathcote Statham; Sir Alfred Brumwell Thomas; Paul Waterhouse.

Associate Members of Council.—Sidney Kyffin Greenslade; Charles Edward Hutchinson; Charles Herbert Reilly; Harry Inigo Triggs; Herbert Winkler Wills; Arthur Needham Wilson.

Representative of the Architectural Association.—Arthur Keen [*F.*].

Auditors.—John Hudson [*F.*]; William Henry Burt [*A.*].

THE STANDING COMMITTEES.

Art.—Fellows: Walter Cave; Edward Guy Dawber; William Flockhart; Henry Thomas Hare; Gerald Callcott Horsley; William Richard Lethaby; Robert Stodart Lorimer; Edwin Landseer Lutyens; Edwin Alfred Rickards; John William Simpson.—*Associates*: William Henry Bidlake; Thomas Davison; Thomas Geoffry Lucas; Walter John Tapper; Septimus Warwick; Edgar Wood.

Literature.—Fellows: Frank Thomas Baggallay; John Alfred Gotch; Sir Charles Archibald Nicholson, Bart.; George Halford Fellowes Prynne; Halsey Ralph Ricardo; Frederick Moore Simpson; Richard Phené Spiers; Henry Heathcote Statham; Charles Harrison Townsend; Paul Waterhouse.—*Associates*: Frank Lishman; Herbert Passmore; Charles Edward Sayer; Cyril Wontner Smith; Arthur James Stratton; William Henry Ward.

Practice. — Fellows: William Henry Atkin-Berry; Howard Chatfeild Clarke; Max Clarke; Alfred William Stephens Cross; George Hubbard; Joseph Douglass Mathews; Alfred Saxon Snell; Henry Tanner, jun.; Thomas Henry Watson; William Woodward.—*Associates*: Kensington Gammell; Edward Greenop; Edwin Richard Hewitt; Herbert Hardwicke Langston; Harry John Pearson; Augustus William Tanner.

Science.—Fellows: Harry Percy Adams; Bernard Dicksee; William Dunn; Frederic Richard Farrow; Matt. Garbutt; Francis Hooper; George Hornblower; John Murray; Charles Stanley Peach; Herbert Duncan Searles-Wood.—*Associates*: Henry William Burrows; Charles John Marshall; Alan Edward Munby; Digby Lewis Solomon; Ernest William Malpas Wonnacott; Ernest Alexander Young.

The Scrutineers' Reports giving details of the voting form part of the Minutes, pp. 619–20.

The Annual Elections: Spoilt Voting Papers.

Mr. REGINALD BLOMFIELD, A.R.A., Chairman of the General Meeting last Monday, in moving a vote of thanks to the Scrutineers for their labours in connection with the elections of the Council and Standing Committees for the ensuing year, observed that it was extremely satisfactory to find such an immense quantity of ability at the service of the Institute, because, though they all felt that the men elected to the Council and Committees were very able men and would discharge their duties in the most satisfactory manner, he also felt—and he thought members would agree with him—that there were a great many able men who were not so elected. The net result was that there was a great quantity of ability at the service of the Institute whenever it was called upon to discharge the duties of the Council and Committees. With regard to the announcement of the names, he should like to make a suggestion, though it was quite informal and out of order. He did not see why the names of the gentlemen who were not elected should be read. Elected and non-elected were all equally able men in these matters, and he hoped that those who were unsuccessful on the present occasion would come up for election another time. However, his present duty was to move a vote of thanks to the Scrutineers—and he would couple with it the name of Mr. I'Anson—because they must have had a most arduous duty. He gathered that in one instance there were 28 spoilt papers and in another 51; that meant an infinite quantity of work on the part of the Chairman and his colleagues in dealing with the result of the election, and he thought they owed them a considerable debt of gratitude for the trouble they had taken in so carefully scrutinising the results.

Mr. LEONARD STOKES, *President-elect*, said he should like to add his word of thanks to the Scrutineers. The time and labour spent on this work must have been very considerable, and it would be interesting to know—it might help them in the future—how it came about that so many of the papers were spoilt, because 66 out of a few hundreds was an enormous proportion. Either it must be gross stupidity on the part of the voters, which it was hard to imagine, or it must be due to carelessness in marking the papers. Again, it was possible that the form of the papers themselves had something to do with it. In some cases there were a number of men to choose from, and voters had to scratch out a great many. If it was simply that the voter did not scratch out enough it was easy to understand; but if it should be that in handling the papers voters did not understand where to mark them, that would make a difference. It certainly seemed a pity that 66 papers should be spoilt in one particular Committee from some cause unknown to members at present. It might be a simple cause, or it might be one that they could not control, but if they could control it it seemed to him that they ought to try. Therefore he thought they might ask the Scrutineers whether they could tell them how it was that so many votes were lost and so many papers spoilt.

Mr. H. HARDWICKE LANGSTON [*A.*] said that, as one of the Scrutineers, he was in a position to answer the question. He should attribute the spoilt papers to gross carelessness. Sometimes voters left, say, 24 names instead of 16 or 18, as the case might be, and of course that invalidated the

papers. Sometimes they did not take the trouble to cross out the name at all, but simply put a little cross at the side. That sort of thing would be passed provided the right number were so marked, but otherwise it was necessary to reject the paper.

Mr. H. Heathcote Statham [*F.*]: A large number of people do not read the directions. The papers are as simple as possible.

A Member: I should like to say, as one of the Scrutineers of the 51 spoilt papers, that it was a matter of scoring out too few names. Instead of erasing nine, voters would erase, say, seven or six or eight, and the Chairman had consequently to rule them out.

The Secretary: I may say that I saw the great bulk of the spoilt papers myself, and can endorse what the last speaker has said; papers were spoilt in most cases because members had voted for too many people.

The Chairman: I am afraid, then, it must be put down to the carelessness of our colleagues, and we must ask them to be a little more careful at another election.

Advance Proofs of Sessional Papers.

At the General Meeting last Monday, Mr. H. Hardwicke Langston [*A.*], in accordance with notice, moved the following resolution: "That it be an instruction to the Secretary to provide and distribute to members attending when Papers are read a synopsis, or an advance proof, of the subject dealt with by the lecturer." Mr. Langston said that the extreme simplicity of the motion would, he ventured to hope, ensure its unanimous approval. It aimed at an enlargement of an existing system the benefit of which, however, had hitherto only been enjoyed by a privileged few. He believed it was the custom to provide a limited supply of advance proofs of Papers read at the Institute; therefore to increase that supply so that a copy should be at the service of each member attending the Meeting would not add very much to the printing bill. Moreover, attentive interest in the Papers read would be greatly enhanced if each member present could intelligently follow the matter discussed—a condition not always possible without a copy of the Paper, and especially so when the lecturer, it may be by misfortune, was not endowed with great fluency of speech.

Mr. George Hubbard, F.S.A. [*F.*], seconded the motion. An advance proof in the hands of the audience would certainly be a great convenience and make it much easier to follow the lecture. There was also another advantage: sometimes a man would be inclined to take part in the discussion if he had been able to take proper notes during the lecture. This was not very easy to do under present conditions, but would be a very simple matter if he were furnished with a copy of the Paper. If there was no practical difficulty in the way he thought the suggestion a very good one, and he had much pleasure in seconding it.

Mr. John Slater [*F.*]: I understand the suggestion to be that an advance proof should be sent to members attending. But that is impossible: one cannot tell who is going to attend. If we are to have advance proofs at all, they must be sent out with a notice to every member of the Institute.

The Chairman: The proposal is that they should be provided and distributed to members attending when the Paper is read. I understand Mr. Langston to mean that they should be distributed in this room.

Mr. Langston: That is what I mean.

A Member: Might I suggest that advance proofs might be provided and handed to any member applying for a copy, as is done at the Institution of Civil Engineers?

Mr. Hubbard: There might be some practical difficulty in that. Papers are not ready much in advance of the date of delivery, and to have them in print at the Institute some days beforehand would present some difficulty.

Mr. W. Henry White [*F.*]: It is not suggested that the full paper should be in print, but that there should be a synopsis; that, I understand, is what Mr. Langston suggests.

Mr. Langston: Or advance proof.

Mr. H. D. Searles-Wood [*F.*]: A synopsis would take time to prepare, and would be an additional expense to print. It would be sufficient to provide 200 or 250 advance copies of the Paper, so that anyone coming to the Meeting might apply for one.

Mr. Maurice B. Adams [*F.*] said he thought it would be rather a disadvantage to the Institute to send out copies of the Paper beforehand, excepting to those gentlemen who were specially invited to attend with a view to their adding to the interest of the evening. A great advantage which often accrued from these Papers was that specialists were invited to come and propose or second a vote of thanks and thus be given an opportunity of offering some remarks on the subject under discussion. He thought it would be most unwise to send out broadcast copies of the Papers. It would be sufficient if copies were placed on the table, so as to be at the disposal of anyone sufficiently interested to be present.

Mr. Heathcote Statham [*F.*] suggested that a short statement of the heads of the Paper should be printed under the title in the circular calling the Meeting. He belonged to a society called the London Musical Association where that was done; the Papers were advertised on a card like a post-card, on which there was room for six or eight lines of small print, in which all the heads of the Paper were put down, so that one knew what line the author would take and what special points he wanted to prove. That could be very easily done, and could be made a general feature in sending out

notices of the Meeting. And he would suggest that the proper person to do it was the author of the Paper, partly because he thought the Editor had enough work on his hands already, and partly because, if the Paper was not quite finished at the time, the author at all events knew what he was going to say. He should like, therefore, to make the suggestion that the author of the Paper should be asked to send a short *résumé* of the heads of the subject to be printed in the circular calling the Meeting, underneath the title of the Paper. In the case of the last Paper that was read, "The Art of the Monument," many members had no idea at all what line the author was going to take. They would have had a better notion of what they were coming to hear if they had had the little *résumé* he suggested.

A MEMBER: That is done by some local societies, and it is a very troublesome thing to do. I think there is hardly anything more difficult than to draw up a synopsis of a Paper, and sometimes it gives an entirely wrong impression.

Mr. STATHAM: I have often done it myself and have never found any difficulty.

Mr. JOHN SLATER said that his experience on the Council was that very often the author did not send in his Paper until two or three days before the Meeting, and with dilatory people like that—and one could not help authors being dilatory sometimes—it would be very difficult to get the synopsis. If a précis of the Paper could be prepared and sufficient copies provided to hand round at the Meeting, that he thought would be a more practicable way of meeting the requirement than that which Mr. Statham suggested.

THE CHAIRMAN: We ought to hear, I think, what the Secretary has to tell us from a financial and practical point of view.

THE SECRETARY: As regards the present practice, we send out an advance proof of the Paper to anyone who we have reason to believe is specially interested in the subject and is likely to attend and speak; and whenever anyone applies for an advance proof, if it is possible to supply it we do so. The cost of supplying fifty advance proofs at each Meeting would be about £10 a year, and for a hundred about £14. A hundred is rather more than the average attendance, so that as a rule a hundred copies would be ample for each Meeting. A synopsis, I am afraid, would be out of the question on most occasions, as Papers are often not received until almost the last moment.

Mr. LANGSTON suggested that the number of copies provided should be limited to a hundred, and those who came first would be served first.

THE CHAIRMAN, in summing up the discussion, said that there seemed to be a certain agreement as to Mr. Langston's proposals, though many different views were expressed. Mr. Maurice Adams felt that it would be undesirable to distribute the Papers too freely beforehand, and he was inclined to agree with him; it might reduce the Institute to the position of some societies which issued their Papers beforehand, with the result that nobody came to the Meeting. A man having the Paper could read it comfortably at home, and would not trouble to go to the Meeting. So that, quite apart from the question of expense, it would probably be undesirable to issue the Papers beforehand. Then Mr. Statham proposed that the authors of Papers should provide a brief synopsis, which should be printed on the notice-paper underneath the title of the lecture. One speaker said he thought this extremely difficult, but he confessed he could not see the difficulty. A man who was going to read a Paper must have some ideas in his head as to its general lines. He does not wait until he has written his Paper to know what his ideas are; and it would be quite easy for him to group them under half a dozen heads. He thought Mr. Statham's idea quite reconcilable with this proposal. The cost of supplying these extra advance copies seemed a small one, and the Institute could well afford it. He thought they should do all they could to add to the interest of their Meetings. He quite agreed with Mr. Langston that if members could be given beforehand some idea of the general heads of Papers, they would take much greater interest in the Meetings and the discussions would be better and more useful. He would therefore put the motion: "That it should be an instruction to the Secretary to provide and distribute to members attending when Papers are read a synopsis or an advance proof of the subject dealt with by the Lecturer."

Mr. MAX CLARKE: Would Mr. Langston agree to limit the number of advance proofs to be supplied to one hundred?

Mr. LANGSTON: Yes, I have already agreed to that.

THE CHAIRMAN: "The issue to be limited to one hundred"—shall I add those words?

Mr. LANGSTON: Yes, I agree certainly.

The motion being voted upon in these terms was carried unanimously.

Special General Meeting, 9th June.

The Special General Meeting, for which notices were issued last week to all members residing in the United Kingdom, was duly held on Thursday, the 9th inst. The Chairman, Mr. James S. Gibson, made a statement showing that the possession of the Architectural Union Company shares, which the Council were asking powers to purchase, would be both for the present and future benefit of the Institute, and was strongly recommended by the chartered accountants who were advising the Council on the matter. As will be seen by the Minutes of the Meeting printed on page 620, the resolutions were carried unanimously, and the confirmatory resolution required under the Charter

is to be brought forward on Monday, the 20th inst. A Special General Meeting has been called for this purpose at 8.25 on that evening; and this will be followed at 8.30 by the Ordinary General Meeting for the presentation of the Royal Gold Medal to Mr. T. G. Jackson, R.A.

Election of Licentiates R.I.B.A.

At the Council Meeting of the 6th June the following candidates, having been found eligible and qualified under the Charter and By-laws, were elected Licentiates of the Institute in accordance with the provisions of By-law 12 :—

ABERDOUR, James Gordon.
ALLEN, George Pemberton.
BAILEY, William Henry (Maritzburg).
BARNARD, Leonard William (Cheltenham).
BELSHER, Bernard James.
BENNETT, John (Bolton).
BETENSON, Frederic Roger, F.S.I.
BISSELL, George Ernest (Colchester).
BOURNE, John Charles.
BRIGGS, George Hamilton.
BROOKS, Stanford Morton (Glasgow).
CALLCOTT, Charles William.
CHURCH, Arthur Harold.
CLARK, Charles Richmond Rowland (Basingstoke).
CLAY, George Felix Neville, B.A.Cantab.
COLERIDGE, John Duke.
COLVILLE, Hubert Leonard.
COOK, Ellis Taylor (Rotherham).
COX, Bernard Joseph Farrar.
CREIGHTON, Henry Richard.
DAVIDSON, William, *Owen Jones Student* 1904 (Edinbro').
DAVIES, Ivor Samuel (Bangor, N. Wales).
DAVIS, George Walesly (Darlington).
DEWES, Walter.
DIGHT, Alfred Henry (Birmingham).
DUFF, John (Rephad, Stranraer).
FRY, Peter George (Weston-super-Mare).
GEORGE, Allan.
GILBERTSON, Alfred (Liverpool).
GRIFFITH, Edward Henry Herbert (Ringwood).
GUNSON, Ernest (Manchester).
HARBER, William Francis.
HAVERS, Albert Charles (Norwich).
HEATHCOTE, Charles Harold (Manchester).
HEATHCOTE, Ernest Grigg (Manchester).
HEWITT, Stanley Goodison (Liverpool).
HOOK, John.
KEMPSTER, Fred.
LAING, Henry George Malcolm.
LAWRENCE, Joseph Thomas.
LUCAS, William Louis, B.A.Cantab.
MARTIN, Robert (Manchester).
McLACHLAN, Herbert Guthrie.
NEWMAN, Charles James (Rugby).
NORTON, Charles Harrold.
PARTRIDGE, Sidney Herbert (Newton Abbot).
PULLIN, Charles Henry.
ROBERTSON, George Birrell, *President of the Institute of Architects of N.S.W.* (Sydney, N.S.W.).
SCRIVENER, Harold Moore (Northampton).
SHANN, Frank Halliwell.
SHARPE, Thomas William.
SHELMERDINE, Edmund John.
SIDWELL, Henry Thomas (Rayleigh, Essex).
SINCLAIR, Colin, M.A., F.S.A.Scot. (Glasgow).
SKIPPER, Charles Frederick (Cambridge).
SMITH, William Auger (Nottingham).
TANNER, Douglas George (Eastbourne).
TATCHELL, Sydney Joseph.
TAYLOR, William (Aylesbury).
TOOMBS, Edwin Ashley.
TOWNSEND, Charles William.
WATERWORTH, John Halsted.
WEBB, William Herbert.
WILLIAMSON, Walter (Bradford).
WINDER, Thomas, Assoc.M.Inst.C.E. (Sheffield).
WINDSOR, Frank.
WIRE, Wilfred Travers.

New Australian Allied Societies.

The Council have admitted to alliance with the R.I.B.A. the Royal Victorian Institute of Architects, whose seat is at Melbourne, and the West Australian Institute of Architects, centred at Perth, W. Australia.

The Royal Victorian Institute, founded in 1871, and incorporated in 1890 under the Statutes of the Parliament of Victoria, was established for the advancement, protection, and elevation of architecture as an art, and the cultivation of friendly intercourse between its members. Its present membership consists of fifty-two Fellows, forty-nine Associates and four Hon. Fellows. Provision is made in its articles of association for holding examinations and granting diplomas.

The West Australian Institute was founded in 1892, its object being the study and cultivation of the science and art of architecture; advancing, protecting and elevating the practice of it in its several branches, and the cultivation of friendly intercourse between the members of the Institute. Its funds may be applied in furthering professional education and in conducting examinations which the Institute may arrange to hold. There are four classes of members, life Fellows, Fellows, Associates and Honorary Fellows. At present the Institute has twenty-three Fellows and ten Associates on the register.

The late Henry Jarvis: Legacy to the Institute.

Intimation has been conveyed to the Council that the Institute is to benefit very considerably under the will of Mr. Henry Jarvis [*Associate* 1866, *Fellow* 1878], of 9 Norfolk Terrace, Brighton, formerly of 29 Trinity Square, Borough, who died at Rome on the 4th March last. The *Daily Telegraph* of the 31st May, since confirmed by one of the trustees of the will, reported that the estate is "of the gross value of £36,047, with net personalty £25,182. Testator left £52 per annum to his brother, George Gray Webb Jarvis, £500 to his nephew, Harold Jarvis, £3,500 upon trust for his niece, Gwendoline Jarvis, £3,500 upon trust for his niece, Edith Selina Jarvis, £2,000 upon trust for his niece, Maud Foster, £300 to his nephew, Noel Jarvis, and he left the residue of his estate to Mr. Nicholas Savery Pasmore, Mr. Herbert Duncan Searles-Wood, and Sir Aston Webb, R.A., President of the Royal Institute of British Architects, upon trust, as to £21 per

annum to each of them for their trouble in connection with the trusteeship, and to hold the remainder for the Royal Institute of British Architects, the capital to be used either for the foundation of travelling studentships to be known as the 'Jarvis' Travelling Studentships, or for the purchase and maintenance of a building to be used as the headquarters of the Royal Institute of British Architects. The amount available for the bequests would appear to be between £15,000 and £20,000."

The Norman Undercroft in Westminster Abbey.

The Norman Undercroft, which adjoins the ancient Chapel of the Pyx at Westminster, is now open to the public on days when the royal chapels are shown, a small fee being charged for admission. The Undercroft is a range of five vaulted bays, which, by the removal of partitions, have been made into one long chamber. It is situated at the south end of the Chapel of the Pyx, and the dividing wall, apparently, has been pierced at some time by two bays, the outlines of which are visible. Overhead is the old dormitory of the monks, part of which is now Westminster School. These buildings are practically all that remain of the building of Edward the Confessor. For many years past the Undercroft has been mainly a receptacle for lumber, and its architectural beauties have been hidden by the masses of old stone and other material with which it has been littered. One of its three entrances has been used by the boys of Westminster School as a short cut from the cloisters to their gymnasium. As the result of the recent restoration by the Dean and Chapter the Undercroft is now a rectangular chamber of about 110 feet long and 45 feet wide. The four pillars which divide the Undercroft into five bays are situated in a line in the centre of the chamber. In two of them much of the original stonework of Edward the Confessor's buildings is visible. The second pillar from the north end presents a curious appearance. On one side it slopes inwards and downwards from the capital, forming a recess which might be used for a small altar or an image. The pillar has now been buttressed. One of the bays and part of another contain the original vaulting. The eleventh-century carving of the capitals of some of the pillars remains—not altogether intact, but sufficiently complete to enable a clear idea to be formed of its characteristics. Some relics which have been found in various parts of the Abbey have been collected in the Undercroft. Among the stones which were brought to light while the floor of the Undercroft was being reconstructed are a number of fragments which are believed to have formed part of the Norman arcading of the original cloisters. These fragments have been fitted together at the south end of the chamber as a tentative reconstruction of three arches of the old arcade. The three bosses are elaborately carved, and one of them, which depicts scenes from the Judgment of Solomon, is in an excellent state of preservation. Among the other architectural fragments is one which is supposed to have been one of the bosses of the old Chapel of St. Catherine. The carved wooden Jacobean pulpit of the Abbey is also preserved in the Undercroft, together with several of the old wooden effigies of kings and queens of England, which it was the custom at royal burials to carry upon the coffin. These images are of older date than some of the wax effigies which have been preserved at the Abbey. Those of Edward III., Elizabeth of York, Henry VII., Catherine of Valois, and Anne of Denmark are fairly complete, but the figure of James I. is without the head, and that of Henry Prince of Wales is simply a bare trunk without vestige of clothing. Some of the figures are carved out of large blocks of wood without joints; others consist of separate limbs fitted together. That of James I. is partly clothed in what is supposed to have been its original costume.

The *Architects' and Builders' Journal* this week has some excellent photographic views of the Undercroft.

Canterbury Cathedral.

In the JOURNAL of the 6th November last was quoted from *The Times* some particulars given by Mr. W. D. Caröe, F.S.A. [*F.*], of the discovery of one of Lanfranc's original tower piers embedded within the north-west pier of the great Angel Steeple of Canterbury Cathedral. *The Times* of the 30th ult. published the following further notes from Mr. Caröe:—

The portion of the Norman pier disclosed proved to be the central shaft of that part of the pier which carried the Norman tower arch across the north transept, and we find that Prior Chillenden's men cut away parts of the north side of the Norman pier and added largely to its southern or inner side. They planned their new tower the same size as Lanfranc's externally, but thickened its walls materially internally.

Of the shaft in question we have been successful in finding the capital *in situ*—a simple cushion of early Norman design and of very considerable projection. The Norman archspring was some 15 feet below the present one.

By these discoveries we are better enabled to gauge the scheme of this part of the Norman church, hitherto somewhat conjectural.

Quite apart from these incidental matters of archæological interest, the wisdom of undertaking the work of consolidating the tower piers has been amply justified by the practical results obtained.

By the aid of the grouting machine we have been able to introduce 1,140 gallons of liquid cement grout into the cavities of the pier. This can be visualised by regarding it as its equivalent in a close-grained solid material. It would just make a solid column the full height of the pier as measured from the nave floor and 2 feet by 1 foot in area. It is hardly surprising that a composite structure containing such cavities, and sus-

taining so great a weight, showed many signs of stress, a source of anxiety which those in charge of the fabric are glad to be free from.

The rebuilders of the nave were evidently aware that they were dealing with a problem of some delicacy. They seem to have tied together the old work and the new by lead plugs, run molten into cavities cut to receive them. At what intervals apart these were inserted we do not know, but one such is now exposed just under the Norman capital.

The pier having been so much strengthened by our recent successful operations, it has been possible to leave a small recess in which Lanfranc's capital can be seen from the floor, a point of no small added interest in the building.

The scaffolding has now been removed and transferred to the south-west pier, also in a fractured condition, but which we shall strengthen in the same manner, and we hope with equal success.

Incidentally I may perhaps refer to an interesting oil painting which has lately come into my possession. It is inscribed "Thos. Johnson fecit. Canterbury Quire as in 1657. Y^e^ prospecte from y^e^ Clockhouse." Johnson drew for Dugdale, and it is on record that Mr. Johnson, of Canterbury, showed the Royal Society in 1685 (when Sir Christopher Wren, one of its founders, was a prominent member) a curious prospect of the Cathedral drawn by himself in oil colours. Whether this is that identical work or not, it introduces its author to us as an English architectural painter of no little skill and of painstaking accuracy. He shows with minute—almost photographic—exactness the condition, at the close of the Commonwealth, of the interior of the choir as seen from Prior Chillenden's pulpitum or screen, upon which the clock stood. It is a singular record of the building soon after the depredations of Richard Culmer (Blue Dick). His myrmidons are depicted at their fell work, breaking the windows and battering the ancient and at that time still surviving thirteenth-century stalls; but the real value of the painting lies in its laborious detail, which is exact, even to the number of stones in the pavement and courses in the pillars. Although both are gone, the original and proper position of the high altar and its altar screen with flanking doors is clearly indicated. The present position occupied by the altar was an innovation of the nineteenth century which it is difficult to justify. The builders' admirable original scheme, devised with the high altar for its focus, round which the monuments of future centuries grew of set purpose, has been falsified. Needless to say that much appears in Johnson's picture which we would fain still have with us. Had it only been painted fifteen years earlier it would have been a priceless record of lost treasures.

The Illumination of Interiors.

Three special lectures on the "Illumination of Interiors" are in course of delivery at the East London College. The first, on "Principles and Daylight Illumination," was given last Tuesday by Professor J. T. Morris, who will also give the second, on "Artificial Illumination by Gas and Electricity," next Wednesday evening. The third, on 22nd June, will be by Professor C. A. M. Smith, and will deal with "Illumination by Petrol Air-gas."

COURSE IN DESIGN AT THE MASSACHUSETTS INSTITUTE.

Professor D. Despradelle gives in *The Tech* (Boston) the following account of the course in Design which he directs at the Massachusetts Institute of Technology:—

It is in the second year that the students are given the first ideas of architecture, that in a certain way the foundation stone of architectural education is laid. By the faithful copy of fragments of architecture they familiarise themselves little by little with examples of antiquity where both reason and beauty find their best expression. They pass by successive studies of the orders from the Doric to the Ionic, from the Ionic to the Corinthian. It is the study of the orders with their consequent development. They should acquire not only by heart all the dimensions of the examples they have copied, but they should retain sufficiently the proportions to reproduce the sentiment of certain parts of the Parthenon as well as of the Theatre of Marcellus.

At the same time certain beautiful originals are copied, designs of masters which we are proud to possess. By this method the study of the archæological as well as of the analytical side of the work of architecture is well started. Students acquire also that first technique so necessary in accustoming themselves to compare, to observe, and finally to express on paper, not an illustration, but to draw a fragment or even a small *ensemble* in such a manner that it suggests the third dimension, or in other words, the architectural work.

Third Year.—The third-year students continue to familiarise themselves with examples always derived from the great classic epochs, but of a higher order, copying less servilely; and in giving to the word "classic" a broader sense they should begin to discern and to understand the signification of the edifices of the past and the proper application of the orders with their proportions. Sometimes comparative studies permit a clear comprehension of the relation of edifices and architectural evolution, and a penetration of the spirit of civilization and art. More often little problems repeated several times each term are given; as for example, "An Entrance to an Administration Building," "A Small Museum," or "Some Special Dwelling House," etc., requiring a choice of appropriate elements, in order to use their initiative. So that in place of making drawings to a single scale almost arbitrary, as in the preceding year, they make in the first place a little *ensemble*, with the different means of representing plan, façade, and section; then, at times, the most important portion to a large scale. This last well-developed part is not presented barrenly on the drawing-board as the trade-mark of a haphazard production, but is well drawn in every detail, and arranged in a frontispiece in such a way as to inspire in the students ideas of structural decoration.

During the course of the different exercises or problems, the elementary principles of composition are given by individual criticism. The different processes of expression are presented and criticised. Students acquire a technique varied, broad, and flexible, and at the same time a beginning of a method simple and ordered, permitting the intelligent approach of an architectural problem. It is only when that important and indispensable third year has been thoroughly followed that the student has the proper equipment to derive real profit from the fourth year course.

Fourth Year.—In the fourth year more liberty is given the students. They are no longer limited by Greek and Roman art and a few examples of the Renaissance. The Romanesque and Gothic epochs, the Renaissance of the different countries, and the best examples of the 17th and 18th centuries, as well as of the intermediary epochs, are opened to them.

"Composition" now becomes the key-note of their efforts. They are made to understand that a "work of architecture" does not consist in the juxtaposition of examples taken servilely from European buildings, or of their arrangement in mosaic, but that above all it is necessary to make a judicious and appropriate choice of the elements at their command, and to arrange them in an harmonious manner, that they may be members of the same family, and that they may convey a definite meaning. . . .

They must understand that the first preoccupation of an architect is to establish with simplicity and logic a reasonable and practical disposition of his plan with the different services, as well as to express the destination and purpose of the edifices, taking into account surroundings, climate and materials, and giving to the interior of the building, as well as to its façades, a decorative treatment at once homogeneous and appropriate. The customs and habits of the locality should be considered also, together with the aspirations of the people in whose midst the building is to be erected. With this aim in view the problem is presented with freedom of interpretation and a choice of inspiration which the character of the subject may suggest.

Problems of three and five weeks' duration alternate with short problems called "esquisse-esquisse" made in two days. These last consist in the development and intelligible presentation of a small subject without criticism from the instructor, except a few general remarks. Such an exercise develops decision and initiative, obliging the student to formulate ideas with celerity and care.

But the chief exercise of the course is the problem of longer duration which is presented as follows:—On a certain date a programme is delivered, A Club House, for example, with all the requirements for such a subject.

The student is given two afternoons to express in a succinct manner the principle of his composition without the help of the instructor. He then gives the instructor his original while keeping for himself a duplicate.

Preserving and respecting the principle of the sketch, it is developed under the instructor's guidance by repeated criticisms and the exposition of the principles of composition, permitting the student to give a precise form to his thought.

Upon the completion of the problem a general exhibition of all the drawings—plans, façades, sections, and sometimes perspectives or details—takes place. A judgment establishes the order of merit, followed by a general criticism before the entire class in the form of a *résumé*, which brings the exercise to a definite conclusion.

Such an exercise, the last week of which all students, third, fourth and fifth years, work practically together, aiding each other in the most fraternal and admirable way, is beneficial to everybody, bringing to light the different points of view and developing the individuality. It is the typical and most important exercise at the Institute. . . .

The second term of the fourth year is practically devoted to the thesis, the final point of the regular studies; that is to say, a more profound study of a subject developed in all its parts, chosen by the students themselves, in which they examine exhaustively the different technical sides of the problem.

Fifth Year.—Beyond a question the diploma awarded at the end of the fourth year is of great significance. The knowledge of the young architect is precious, as the professional success of generations of students testifies. It is easy to see, however, that with such a programme of study as that demonstrated above, a programme imperiously imposed by the conditions of modern life, the time of preparation for the important and complex rôle to be filled by the architect is all too limited. The way is but half-achieved. Scarcely five, or at most six, months have been given to acquire and assimilate a knowledge which should become a beacon and not a burden, exacting a devotion of as many years as in the great centres of study in Europe.

So clearly recognised did this need become that a fifth year of study was established at the Institute, of which the results from its *début* have been most satisfactory.

Although an appreciation from the professor in charge is somewhat delicate, yet things must be explained. Facts are facts. Theoretically and practically from the outset the fifth year has been a success. It has become an important factor with the students; it has raised the standard of architectural education in America, and it is regarded as a necessity by experts both at home and abroad. The number and importance of the problems of the fourth year being of necessity inadequate, owing to limited time, the plan of work for the fifth year embraces the more profound study of the types of edifices and compositions which explain or resume the many and varied manifestations

of a great people; as for example, a courthouse, a city hall, important residences, hospitals, churches, large assembly halls, theatres, a university, bathing establishments, establishments for the people, commemorative monuments, etc. etc. To these are added "esquisses-esquisses" of 12 and 24 hours "en loge," and special problems for the study of works in different materials: metal gates, doorways of wood, a church pulpit, the interior decoration of a public hall, of a private residence, to cite a few examples. A larger place is given the plan, which is of capital importance—indeed, the foundation in considering an architectural problem.

Much time is devoted to theoretical and practical study, together with a comparative study of the different classes of architectural compositions; as for example, compositions compact and dispersed, private and public, open-air compositions, edifices of administration, charity, education, and those of purely business utility: bridges, squares, public gardens, the lay-out of a town; plans comprising several buildings upon flat sites, upon declivities, at the seaside, etc.

Numerous illustrations of edifices are presented, together with an analytical revision and an archæological *résumé* of the great periods of art in the several orders, administrative, glorious, religious, and domestic—such as Greece with its temples, Rome with its forum, baths, and triumphal arches; the Byzantine, the Romanesque, and the Gothic periods. The imposing manifestations of the Renaissance, the seventeenth and eighteenth centuries in France, not omitting the best examples of the nineteenth century, restorations of the antique, and the *concours* of the Grands Prix de Rome which so well resume many principles, eloquently demonstrate the application of the lessons of the past to the manifestations of the present.

Students in this course are enabled to devote practically the whole time to architecture proper. Every problem is studied on all sides, practical and æsthetic, and is synthesised as a perfect and well-proportioned organism. Repeated studies are made until plans, façades, sections, and details harmonise, unite, and support each other, as the skin clothes the body, leaving the form and structure beneath it to be divined.

Résumé.—Commencing with the classical grammar of architecture, which defines so simply the architectural work, the past is studied in all its forms, historical, structural and æsthetic, and the lesson to be derived therefrom, together with what is transmissible from one generation to another, is sought. Quality of draughtsmanship and design is constantly developed in order that the architect may express his practical ideas in a complete and artistic manner. The transformation of architecture and the styles under the influence of religious, philosophical, and social currents, are shown by repeated criticisms and lectures. By varied problems, academic, semi-classic, romantic, mixed or modern, the creative and imaginative faculties of the student are awakened. A man is formed with an equipment which permits him to discuss intelligently, pencil or brush in hand, with all his collaborators—engineers, constructors, decorators, sculptors, etc.

By developing the education of the mind, the hand, the eye, and the heart, a well-informed man of the present as well as of the past is produced—a man having at command a means of expression which permits his approach to all the problems of modern needs, one who formulates his thought with clearness and who is abreast of his time and of his epoch; he is endowed with the precision of the engineer, the soundness of mind of the man of business, and the imagination of the artist. In other words, a leader in the accomplishment of architectural work—the "Maître de l'œuvre," not a specialist—a man useful and indispensable to his country.

LEGAL.

Architect: Negligence: Damages.

RAIKES *v.* POWER, AND POWER *v.* RAIKES AND KING, BY COUNTERCLAIM.

This was an action heard before Mr. Justice Darling and a special jury in the King's Bench Division. Judgment was delivered on the 7th June. The action was originally brought to recover the amount due upon a contract to build a picture gallery for the defendant Mr. Power. Judgment was obtained for that amount, and the defendant Power then counter-claimed against Mr. R. T. Raikes, the builder, for breach of contract, and against the architect, Mr. C. Oury King, for negligence in the preparation of the plans and construction of the gallery.

Mr. Clavell Salter, K.C., and Mr. Harold Morriss appeared for Power; Mr. Foote, K.C., and Mr. Rayner Goddard for King; and Mr. Colefax for Raikes.

The *Times* report states that the plaintiff on the counterclaim, Mr. William M. Power, a picture dealer, in January 1908 took a lease of 123A Victoria Street, at a rental of £500 a year. For the purposes of his business the plaintiff arranged with the defendant, Mr. Charles Oury King, who was the architect of the estate, to prepare plans for the erection of a picture gallery, and it was arranged that Mr. R. T. Raikes should contract to do the work. The building was completed in March 1909. The pictures were hung in the gallery, and it was found that some of them were affected by damp and seriously injured. The pictures are valuable, being by Sir Joshua Reynolds, Gainsborough, Hogarth, and other celebrated artists. The building was examined, and it was discovered that the ventilation was defective. It was contended on behalf of Mr. Power that it was necessary and proper in the construction of a picture gallery, and for the subsequent use of it for the exhibition of pictures, that provision should be made in the walls for an air draught or other means of ventilation to dry and keep dry the walls, so as to prevent the pictures from becoming damp and mildewed; that no air draught or proper means of ventilation was provided, and that this caused the damage complained of. On the part of the Messrs. Raikes and King, it was contended that there had been no negligence in the design or construction of the building, and that the damages had been greatly exaggerated.

Mr. Justice Darling, in summing up to the jury, said the questions for them were: (1) Was Mr. Raikes guilty of

negligence in building the picture gallery? (2) Was Mr. King guilty of negligence in designing or superintending the building of the picture gallery?

The jury found that Mr. Raikes was not guilty of negligence, but that Mr. King was, and they assessed the damages at £45.

The defendant on the counterclaim (Mr. King) having paid £105 into Court with a denial of liability, judgment was entered for him with costs, and it was ordered that £60 be paid out to him, the balance to remain in Court pending taxation.

London Building Acts: Council School Buildings: Fees of District Surveyor.

GALBRAITH BROTHERS *v.* DICKSEE.

This case came before the Lord Chief Justice and Justices Channell and Coleridge, sitting as a Divisional Court of the King's Bench Division, on May 24, by way of appeal by Messrs. Galbraith Brothers against an order made by Mr. Hopkins, the stipendiary magistrate sitting at Lambeth Police Court, for the payment by the appellants to Mr. Bernard Dicksee, the District Surveyor for Newington, etc., of the sum of £16 7*s.* 6*d.*, the District Surveyor's fees, according to the Schedule to the Act, in respect of the erection of a new school building and outbuildings situate and being the John Ruskin school for defective children, Beresford Street, Walworth.

It has been contended by the London County Council that since the transfer to them from the defunct School Board of the duties and properties of the Education Authority, the school buildings have become exempt from the operation of Parts VI. and VII. of the London Building Act 1894, and from the supervision of the District Surveyor. The question came first before the Court in the case of The London County Council *v.* The District Surveyors' Association (Incorporated) and Willis, on the question of the right of the District Surveyor to notice under section 145 of the Act of 1894. Mr. Garrett, the stipendiary magistrate sitting at the South Western Police Court, had held that the school buildings were not exempt from the operation of Parts VI. and VII. of the Act, and that notice must be given; from which decision the London County Council had appealed, and the Divisional Court had held that notice must be given to the District Surveyor, as, apart from Parts VI. and VII., he had important duties to perform; in any case, therefore, notice must be given.

This case now came before the Court for a decision upon the point as to whether the District Surveyor is entitled to the fees prescribed in the Schedule.

From the case as stated by the Magistrate it appeared that in May 1908 the County Council had entered into a contract with the appellants to erect the school in question. The building was begun without notice having been served on the respondent, who accordingly wrote demanding notice. As the case of The London County Council *v.* The District Surveyors' Association was then pending, it was arranged that the question as to building notice should stand over until that case was decided. The respondent continued to survey the works during progress, and after the decision had been given in the case referred to he again demanded notice, which was then given, and on completion he rendered his account for the fee provided in the Third Schedule to Part I. of the Act of 1894. Payment having been refused, a summons had been issued, and the magistrate, although he was of opinion that the buildings were exempt from Parts VI. and VII., had decided that the fees were due and had made the order for payment, which decision was now appealed against.

Mr. Montague Lush, K.C., and Mr. Bodkin appeared for Messrs. Galbraith; Mr. Horace Avory, K.C., and Mr. Walter Ryde for the District Surveyor.

Mr. MONTAGUE LUSH in opening the case for the appellants said that it was contended on their behalf that the said buildings were buildings exempted by section 201 (5) from Parts VI. and VII., and that in consequence the respondent had no duties to perform under such parts of the Act, and was not entitled to claim or receive fees specified in the Schedule.

THE LORD CHIEF JUSTICE: That was the point raised in Willis's case.

Mr. LUSH: The point there was whether he was entitled to notice at all.

THE LORD CHIEF JUSTICE: I know, but the ground of his not being entitled to notice was that he had no duties because it was an exempted building.

Mr. LUSH, proceeding, argued that if they were exempt from Parts VI. and VII., they were exempt from having the Surveyor's supervision of the structure; and it was in respect of his supervision that the first part of the schedule applied.

THE LORD CHIEF JUSTICE: It does not say in respect of supervision. That is just what I had in my mind in the other case. It is not in respect of supervision, but in respect of protecting other interests which might be interfered with by the construction of the building.

Mr. JUSTICE CHANNELL: As far as I can see, this schedule provides for a first and general fee in respect of a new building; and then following on that there are different fees, which are not charged in this case because he has not done them. There is one general fee; and if this is a new building he is entitled to that general fee. It may be only 10*s.*, but that may be merely for making a note in his book that he has received notice.

Mr. LUSH, proceeding, urged that the consequence would be that the same fees would be payable to the District Surveyor who had the work of supervising the construction of the whole building as would be payable if he only had the building line to look after.

Mr. JUSTICE CHANNELL: I should say the same fees are payable in respect of a building that gives a great deal of trouble as for one that gives no trouble at all. The one may be a careful man who does not give much trouble, whereas another may give a lot of trouble. It is the same lump sum fee.

Mr. LUSH urged that the fee schedule was framed to meet the case where the District Surveyor had the power of varying and interfering with the structure of the building.

THE LORD CHIEF JUSTICE: I find nothing in the beginning about supervising or doing work, or anything of the kind. It is for the building.

Mr. LUSH said that if the fee is a general fee merely because a new building is put up, of course he could not contend that the Surveyor was not entitled to the fees; but, on the other hand, he contended that the fees in the schedule were for rendering services by the District Surveyor, which services in this case not only had not been rendered, but could not be rendered; consequently the Surveyor could not be entitled to the fees.

Mr. JUSTICE CHANNELL: There are certain services for which he is to have a special fee. Then the services, whatever they may happen to be, that he has to render are covered by the one general fee; and that is a fee to be in respect of the particular building, covering therefore anything he may happen to have to do, whatever it is, small or big, in respect of that. If it happens to be nominal, so much the better for him.

THE LORD CHIEF JUSTICE, in giving judgment, said he would not call on Mr. Avory. This was an attempt that he foresaw when the previous case was before him. In the course of the argument he remembered saying, What does it matter if a notice has to be served? And they had said, very wisely, that notice might entitle the Surveyor to a fee. Having been wrong, they were now coming to endeavour to get the Court to say that, although there is a lawful notice imposed on the builder, the Surveyor who acts in pursuance of that notice is not entitled to fees. The case was really concluded, but he would

briefly state what seemed to him the conclusive answer to Mr. Lush's argument. As was pointed out in the previous case, section 201 would only exempt these buildings from Parts VI. and VII. of the Act; if the notice that had to be given to the Surveyor were given to him by virtue of Parts VI. and VII., and if his duties were confined to those parts, there would have been a good deal in the argument that, inasmuch as all his duties were under Parts VI. and VII., and the notices were given under those parts, therefore, as he had no other duties to perform, there was no necessity to give him notice. But Mr. Lush only made his argument possible by using the words "supervising the building" in a sense that was not properly applicable to the case at issue. It was not supervising the work, it was doing the work or duty of a District Surveyor. It could not be seriously disputed that under Part V. the Surveyor had many things to watch; he had to watch the height; he had to watch the building line; he had to watch the by-laws. It might be that none of those things were likely to be infringed, but at the same time they had the Act to deal with. His Lordship quoted sections 145 and 146. Mr. Lush had said many times that in this particular building he would have nothing to do. That might be, but it did not follow that because he had nothing to do in a particular case, he would have nothing to do in any case; and, as Mr. Justice Channell has said, in some buildings he might have to go there much more often because the builder might be a person who would only observe the law when the Surveyor was looking after him. Under those circumstances having duties to perform under sections 145 and 146, and notice having been given to him (as it ought to have been given him) and having a duty to go there, section 154 followed (which his Lordship quoted). He then turned to the Fee Schedule. All these fees were calculated by the number of squares that there are in the particular building, and they were covered by the fee on the new building. As Mr. Justice Channell had pointed out, it did not say "for supervising the materials," or "for supervising the work as it is being carried out," but it was a fee to be paid on that building because the Surveyor had got simply to keep the eye of a watch-dog on what was going on. The London County Council were not entitled to come into Court and to say, "We are so good and so virtuous that we never can put the Surveyor to any trouble." So much the better for the Surveyor. He had a fee under the statute for doing his duty, and if the builder was so good that he never wanted watching at all, he got his fee for very little work. His Lordship pointed out that the third part of the Schedule provided fees for special services; and therefore the Schedule did contemplate fees for general services (which might in some cases be for no services at all) and other fees for special services. This case was an attempt to render of no effect the judgment in the previous case by holding that though notice must be given, yet the Surveyor was not entitled to fees. The decision of the magistrate was right, and the appeal must be dismissed.

Mr. Justice Channell and Mr. Justice Coleridge agreed.

Mr. AVORY: I understand this judgment is not to be taken as deciding that these buildings are exempt under section 201.

THE LORD CHIEF JUSTICE: I have decided nothing more than that these fees are payable whether they are exempt or not.

Mr. AVORY: I only want your Lordship's judgment not to be misunderstood.

THE LORD CHIEF JUSTICE: No, I have not said anything about their being exempt. I have assumed for this purpose in my judgment that Parts VI. and VII. do not apply.

Mr. AVORY: Your Lordship has not decided that. The appeal will be dismissed with costs?

THE LORD CHIEF JUSTICE: Yes.

MINUTES. XV.

At the Fifteenth General Meeting (Business) of the Session 1909–10, held Monday, 6th June 1910, at 8 P.M.—Present: Mr. Reginald Blomfield, M.A. Oxon., A.R.A., F.S.A., *Vice-President*, in the Chair; 33 Fellows (including 8 members of the Council) and 12 Associates (including 1 member of the Council)—the Minutes of the Meeting held 23rd May 1910 were read and signed as correct.

Mr. Robert Cochrane, LL.D., I.S.O., F.S.A., of Dublin, *Fellow*, attending for the first time since his election, was formally admitted by the Chairman.

The Secretary read the following Reports of the Scrutineers appointed to count the votes recorded for the election of the Officers, Council, and Standing Committees for the ensuing year of office:—

Scrutineers' Reports.

The following have been elected:—

PRESIDENT.—Mr. Leonard Stokes (unopposed).

PAST PRESIDENTS.—Thomas E. Collcutt; Ernest George (unopposed).

VICE-PRESIDENTS.—Reginald Blomfield; Alfred W. S. Cross; E. Guy Dawber; Ernest Newton (unopposed).

HONORARY SECRETARY.—Henry T. Hare (unopposed).

REPRESENTATIVES OF ALLIED SOCIETIES.—H. C. Charlewood, Newcastle; J. B. Wilson, Glasgow; P. S. Worthington, Manchester; Wm. M. Cowdell, Leicester; Arthur S. Dixon, Birmingham; Robert Evans, jun., Nottingham; Sydney D. Kitson, Leeds; Arnold Thornely, Liverpool; John Watson, Edinburgh (unopposed).

REPRESENTATIVE OF THE ARCHITECTURAL ASSOCIATION.—Arthur Keen (unopposed).

HONORARY AUDITORS.—John Hudson; William Henry Burt (unopposed).

(*Signed*) Edward B. I'Anson, *Chairman of Scrutineers.*

MEMBERS OF COUNCIL.—*Elected*: Gibson, 565 votes; Lanchester, 539; Prentice, 529; P. Waterhouse, 505; Hall, 502; Lutyens, 496; Gotch, 495; Pite, 487; Ricardo, 486; Burnet, 420; Flockhart, 416; Adams, 376; Thomas, 365; Cave, 300; Hubbard, 355; Forsyth, 341; Clarke, 338; Statham, 327.

Not elected: Rickards, 326 votes; Dunn, 312; Woodward, 302; Green, 301; Tanner, 288; Downing, 272; Pick, 252; Warren, 243; Quennell, 233; Wimperis, 225; Farrow, 198; White, 191; Peach, 185; Brewill, 173; Solomon, 172; Scott, 167; Ogden, 151; Perks, 148; Jemmett, 137; Wilson, 91; Figgis, 79; Tubbs, 78; Nield, 75; Hale, 70; Doll, 68.

809 voting-papers received, including 29 spoilt.

(*Signed*) F. Dare Clapham, J. M. Stanley Burmester, T. Dinwiddy, Allan Graham, R. H. Mew, J. L. Seaton Dahl, F. R. Gould Wills, Arthur Wm. Kenyon, H. H. Langston, Edward B. I'Anson, *Chairman, Scrutineers.*

ASSOCIATE MEMBERS OF COUNCIL.—*Elected*: Wilson, 616 votes; Greenslade, 604; Triggs, 542; Reilly, 468; Wills, 435; Hutchinson, 400.

Not elected: Munby, 395; Ayrton, 328; Gammell, 305.

Six spoiled papers.

(*Signed*) Richd. M. Roe, Edward B. I'Anson, *Chairman, Scrutineers.*

ART STANDING COMMITTEE.—*Fellows.—Elected*: Dawber, 611 votes; Lutyens, 578; Hare, 544; Lethaby, 531; Flockhart, 475; Simpson, 468; Rickards, 467; Horsley, 440; Lorimer, 420; Cave, 413.

Not elected: Brierley, 405; Balfour, 367; Forsyth, 361; Blanc, 257; Bolton, 231; Watson, 156; Reay, 136; Perks, 131.

(*Signed*) Robt. C. Murray, C. Cellas Robin, H. W. Hetherington Palmer, A. Howell, Horace Farquharson, W. Ernest Hazell, Edward B. I'Anson, *Chairman, Scrutineers.*

Associates.—Elected: Bidlake, 623 votes; Lucas, 574; Tapper, 506; Warwick, 484; Davison, 476; Wood, 475.

Not elected: Anderson, 401 votes; Ayrton, 386.

Twenty-eight spoiled papers.

(*Signed*) Robt. C. Murray, C. Collas Robin, A. Howell, H. W. Hetherington Palmer, Horace Farquharson, W. Ernest Hazell, Edward B. I'Anson, *Chairman, Scrutineers.*

LITERATURE STANDING COMMITTEE.—*Fellows.—Elected*: Spiers, 585 votes; Gotch, 560; Ricardo, 529; Nicholson, 510; P. Waterhouse, 500; Statham, 454; Baggallay, 398; Townsend, 377; Simpson, 364; Prynne, 363.

Not elected: Green, 354 votes; Corlette, 351; Warren, 314; L. Waterhouse, 221; Fyfe, 198; Dunbar Smith, 175; Jemmett, 163; Favarger, 142; Taylor, 136.

Fifty-one spoiled papers.

(*Signed*) H. Seton Morris, A. Wyatt Papworth, John Hunt, Harold French, Edward B. I'Anson, *Chairman, Scrutineers.*

Associates.—Elected: Wontner Smith, 550 votes; Stratton, 528; Passmore, 508; Ward, 476; Sayer, 426; Lishman, 423.

Not elected: Davidge, 318 votes; Hiorns, 275.

(*Signed*) John Hunt, Harold French, H. Seton Morris, A. Wyatt Papworth, Edward B. I'Anson, *Chairman, Scrutineers.*

PRACTICE STANDING COMMITTEE.—*Fellows.—Elected*: W. Woodward, 480 votes; Max. Clarke, 461; A. S. Snell, 437; A. W. S. Cross, 423; G. Hubbard, 420; Atkin-Berry, 384; H. Tanner, jun., 365; Chatfield Clarke, 331; Douglass Mathews, 322; T. H. Watson, 320.

Not elected: W. H. White, 315 votes; L. Solomon, 280; H. A. Satchell, 264; E. Flint, 241; S. P. Pick, 229; W. G. Wilson, 229; G. E. Nield, 172; W. G. Waymouth, 167; P. B. Tubbs, 137; H. P. Monckton, 122; O. C. Hills, 113.

Sixty-six spoiled papers.

(*Signed*) Sydney F. Bartleet, Frank J. Potter, L. K. Hall, John Hunt, Charles B. Bone, Edward B. I'Anson, *Chairman, Scrutineers.*

Associates.—Elected: H. J. Pearson, 458 votes; E. Greenop, 446; E. R. Hewitt, 433; A. W. Tanner, 420; H. H. Langston, 332; K. Gammell, 331.

Not elected: H. Shepherd, 319 votes; E. G. Page, 306; H. Porter, 304; M. S. Hack, 200.

(*Signed*) Charles B. Bone, Sydney F. Bartleet, Frank J. Potter, L. K. Hall, John Hunt, Edward B. I'Anson, *Chairman, Scrutineers.*

SCIENCE STANDING COMMITTEE.—*Fellows.—Elected*: H. D. Searles-Wood, 588 votes; H. P. Adams, 551; M. Garbutt, 541; W. Dunn, 524; J. Murray, 508; B. Dicksee, 487; C. S. Peach, 478; F. Hooper, 473; F. R. Farrow, 471; G. Hornblower, 388.

Not elected: W. E. V. Crompton, 387 votes; A. W. Moore, 378; R. H. Weymouth, 338; G. A. Lansdown, 324.

Associates.—Elected: E. W. M. Wonnacott, 483; A. E. Munby, 470; E. A. Young, 459; H. W. Burrows, 414; C. J. Marshall, 413; D. L. Solomon, 403.

Not elected: A. S. Tayler, 365; J. P. Clark, 327; J. W. Stonhold, 275; S. W. Benstead, 172.

Nineteen spoiled papers.

(*Signed*) Lawton R. Ford, Henry James Wise, H. S. East, Percy Cotton, C. Barry Cleveland, Edward B. I'Anson, *Chairman, Scrutineers.*

Reference having been made to the large number of rejected voting-papers, Scrutineers present explained that the papers were invalid owing to the voters disregarding the printed directions and returning too many names.

On the motion of the Chairman a hearty vote of thanks was accorded to the Scrutineers for their labours in connection with the elections.

The following candidates were elected by show of hands under By-law 9:—

As FELLOWS (4).

BARROW: Ernest Robert [*A.* 1894, *Ashpitel Prizeman* 1893].

COOKSEY: Arthur William [*A.* 1888].

DAWSON: William Bruce [*A.* 1901].

GILBERT: Horace [*A.* 1890].

As ASSOCIATES (8).

ALEXANDER: George Luard [*Special Examination* 1909].

BEALL: Walter John [*Colonial Examination* 1909] (Pietermaritzburg).

HADWEN: Noel Waugh [*P.* 1905, *S.* 1909, *Qualified* 1909] (Triangle, Yorks).

MUNNINGS: Joseph Fearis [*Special Examination* 1909] (India).

ROBERTS: David John [*Special Examination* 1909] (Birmingham).

SUTCLIFFE: Hartley [*Colonial Examination* 1909] (Melbourne, Australia).

TAYLOR: Edward Alexander [*Colonial Examination* 1909] (Sydney, N.S.W.).

THOMPSON: Morris [*P.* 1901, *S.* 1904, *Qualified* 1909] (Doncaster).

The Hon. Secretary having announced the receipt of a number of books presented to the Library a cordial vote of thanks was passed to the donors.

On the motion of Mr. H. Hardwicke Langston [*A.*], seconded by Mr. George Hubbard, F.S.A., [*F.*], it was unanimously

RESOLVED, that it be an instruction to the Secretary to provide and distribute to members attending when Papers are read a synopsis or an advance proof of the subject dealt with by the lecturer—such issue to be limited to 100 copies.

The proceedings closed and the Meeting separated at 8.50.

Special General Meeting (A.U.C. shares).

At a Special General Meeting, summoned by the Council in accordance with the provisions of Clause 22 of the Charter, and held Thursday, 9th June 1910, at 5.30 p.m. Present, Mr. James S. Gibson, *Vice-President*, in the Chair; 44 Fellows (including 9 members of the Council) and 14 Associates (including 2 members of the Council), the Chairman having briefly stated the purpose of the Meeting, explained the Council's reasons for bringing forward the resolutions of which notice had been given, and enumerated the advantages which would accrue to the Institute from the purchase of the shares of the Architectural Union Company.

After a short discussion the Chairman moved, and it was unanimously

RESOLVED, that the Council be empowered to purchase all the shares in the Architectural Union Company not now in the possession of the Royal Institute.

It was also unanimously

RESOLVED, that the Council be empowered to pay to Mr. Edward Freeman the sum of £1,250 in compensation for the eventual loss of his office as Secretary of the Architectural Union Company.

The proceedings then closed and the Meeting separated at 6 p.m.

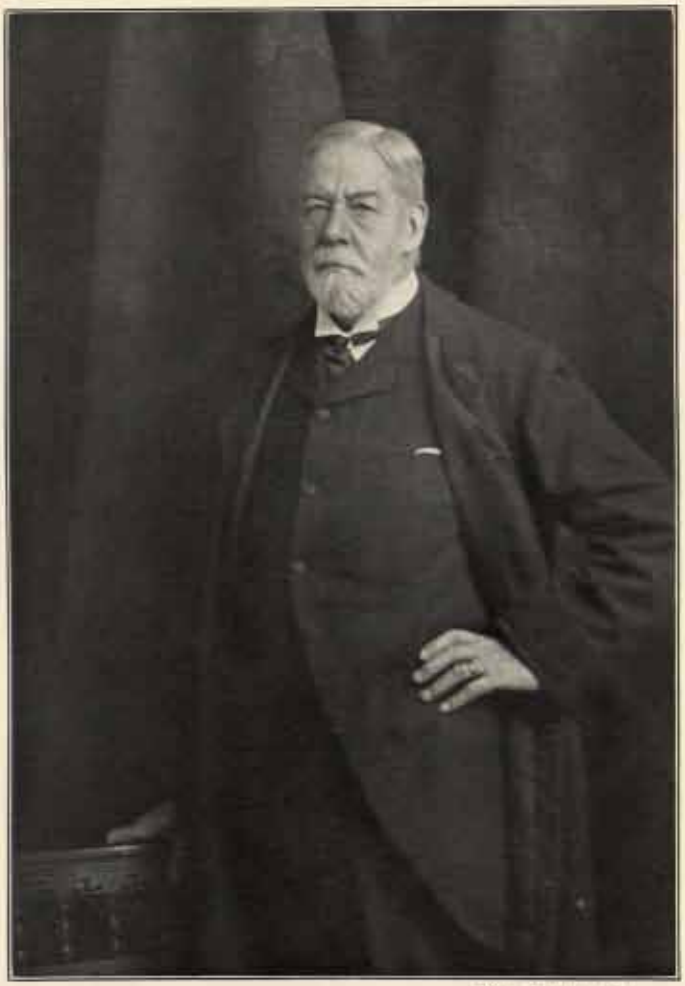


Photo. Elliott & Fry.

Thos. G. Jackson.
1909.

THOMAS GRAHAM JACKSON, R.A., LL.D., F.S.A.

ROYAL GOLD MEDALLIST 1910.



King's Mound, Oxford, for Balliol College. (T. G. Jackson, architect.)

THE ROYAL GOLD MEDAL, 1910.

Presentation to Mr. Thomas Graham Jackson, R.A., LL.D., F.S.A., Monday, 20th June 1910.

ADDRESS BY MR. ERNEST GEORGE, A.R.A., *President* (*Royal Gold Medallist* 1896).

WE have the privilege, and at the same time the important trust and responsibility, of electing a recipient for the Royal Gold Medal; it is destined for one who by his life has advanced the Art of Architecture either by building, by writing, or by research.

The last presentation was to Dr. Arthur Evans, in recognition of his valued contribution to our knowledge by the unearthing of Knossos, throwing light on an early phase of architecture. To-day it is the accomplished architect and man of letters that is chosen by his brother-architects, with Royal approval, for the distinction of the King's Gold Medal for Architecture. The confirmation of our choice was among the last acts of the Royal Patron that we have lost.

Mr. Thomas Graham Jackson, upon finishing his University course, became the pupil of Sir Gilbert Scott, thus beginning his career in the heat of the Gothic revival; and he acquired a knowledge of the mediæval methods of building which has served him well; for I think the Gothic inspiration is felt in most of his works, though they may be clothed with forms or detail of other origin.

Mr. Jackson is an artist of strong individuality, with an intimate and practical knowledge of material, and he has helped much to bring together the several arts; he was an active member of the Art Workers' Guild, of which he was some time Master.

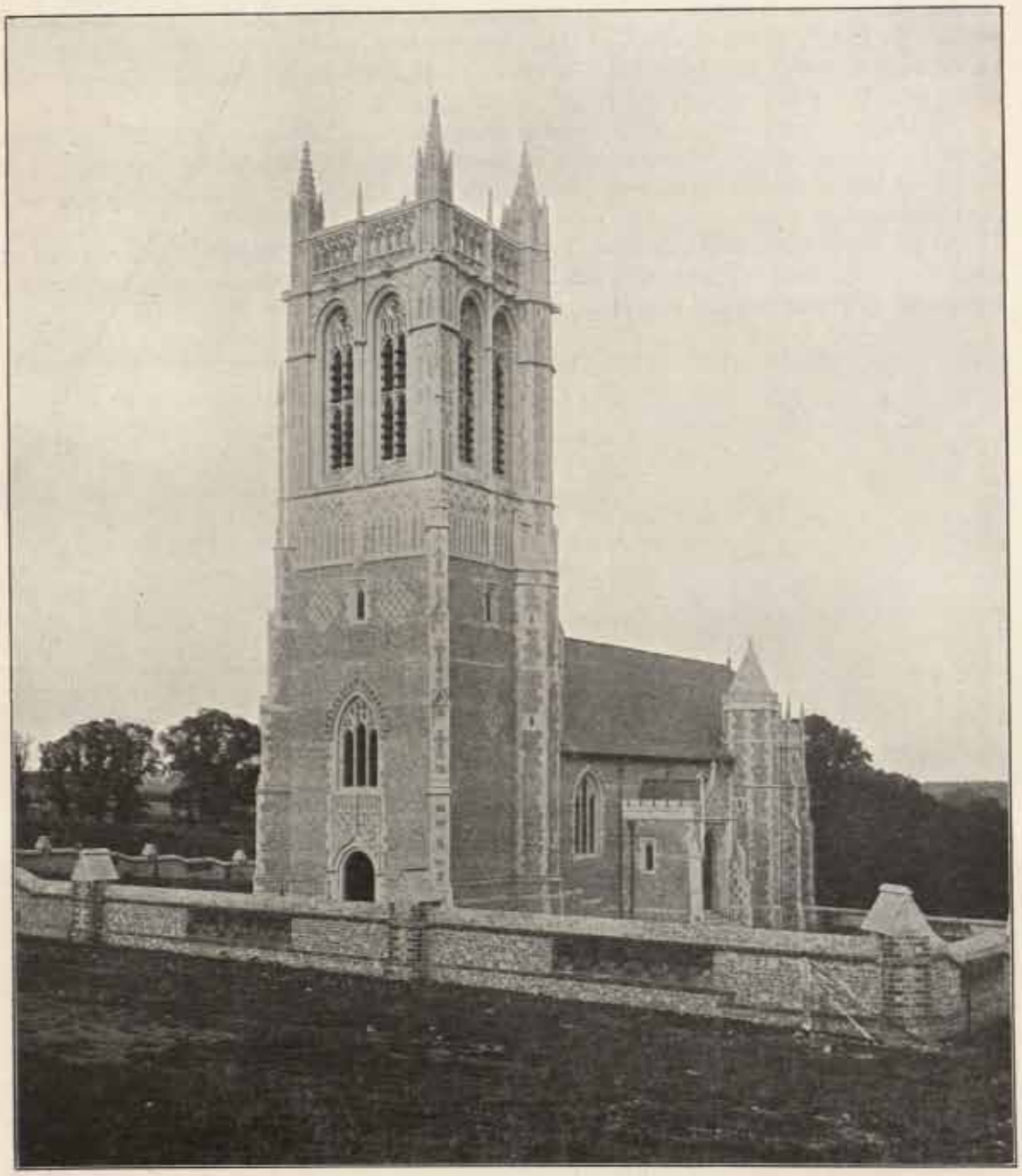
Mr. Jackson has had the satisfaction of making his impress especially on one city, with which his name will always be associated. Oxford, almost unique in its survival as a mediæval city, was bound to move with the times, and we might have feared the result of changes that must come. But, by good fortune, the modern growth of that city has been generally under



Rugby School, Speech-room. (T. G. Jackson, architect.)

wise direction: the spirit of the old has been preserved, while there is freshness, originality, and beauty in most of the schools and colleges that have risen in our own time, and that harmonise happily with the works of the pious founders, and for very much of this work Mr. Jackson is responsible.

He is a Royal Academician, a Fellow of the Society of Antiquaries, and an Honorary Fellow of Wadham, Oxford, while Cambridge has just honoured him with the degree of Doctor. He



Northington Church, Hants. (T. G. Jackson, architect.)

has a secure place among men of letters ; I think his first book appeared nearly forty years ago, and it has been followed from time to time when he had wisdom to impart.

As architects we are glad to honour those among us—a small minority—who can set forth our aims and explain our cause to a world that has been rather heedless of our art ; when wrongs have been contemplated, Mr. Jackson's voice has always sounded clear. Architectural education is a matter in which he has always taken keen interest, and he has been a valued member of the Board of Architectural Education. His interest in this education is not limited to the architect ; he would have the principles of our art understood once more by the craftsman, the builder, the employer, and the public ; then we architects would be forced to do only our best. I hope most of us feel, as I believe Mr. Jackson does, that the advancement of architecture is of vastly more importance than the prosperity of the architect.

Mr. Jackson has made repeated visits to the Nearer East, especially to the Balkan States, where he has studied the Romanesque in its home, acquiring such intimate knowledge of the traditional mode of building that the Dalmatians sought his help to build the Campanile of their Cathedral at Zara.

Of the many works of Mr. Jackson, I suppose the Examination Schools at Oxford stand out most distinctly, and we remember the interest they caused at the time of their building, inaugurating in some respects a fresh departure.



The Schools, Oxford. (T. G. Jackson, architect).



New Chapel, Hertford College, Oxford. (T. G. Jackson, architect.)



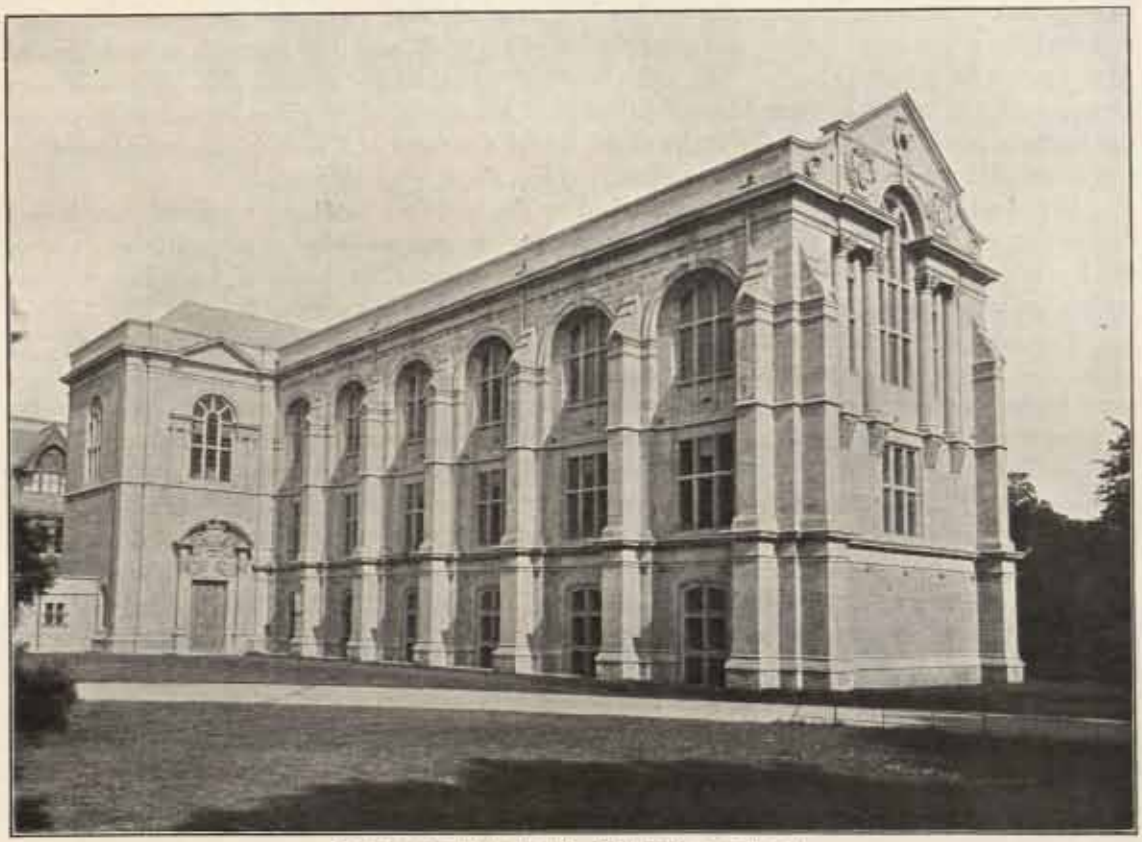
Radcliffe Library, Oxford. (T. G. Jackson, architect.)

To Mr. Jackson we owe modern buildings for Brazenose, Lincoln, Corpus, Trinity, Balliol, and Hertford, the new Radcliffe Library, Somerville Hall, the City High School, and the High School for Girls; also the restorations of the Bodleian Library, St. Mary's and All Saints' churches. At Cambridge we owe to him the new Law Library and Law School, as well as the Sedgwick Memorial Museum amongst other buildings.

From the same hands we have the restoration of many precious relics, among them Eltham Palace, Great Malvern Priory, Bath Abbey, Christchurch Priory. His also is the anxious work of maintaining Winchester Cathedral against the threatenings of underground forces.

We might make a long list of churches built or restored, as well as of important additions to Eton, Westminster, Rugby, Harrow, and most of the seats of learning—a grand record of scholastic work which at the same time is *scholarly* work, and which will always be honourably associated with the name of Thomas Graham Jackson.

He will gratify us now by coming on to the list of Royal Gold Medallists, and allowing me the honour, in your behalf, of placing upon him the blue riband of our calling.



Radcliffe Library, Oxford. (T. G. Jackson, architect.)

MR. JACKSON'S REPLY.

MR. PRESIDENT, LADIES, AND GENTLEMEN,—

I am sure I need not say how deeply sensible I am of the great honour that has just been conferred upon me. To an artist no appreciation can be so welcome as that of his brother artists. We live indeed by the patronage of the public—a public which is I believe, on the whole in the end, able to form a right estimate of the merits of those whom it employs, but which is perhaps, too, liable to be influenced by fashion and by a blind obedience to critics to be always right at the moment—a public certainly more likely to be shocked than pleased by anything that has a show of originality. It is, therefore, rather to the judgment of those who follow the same craft as himself that the artist looks for the due appreciation of his work, and if he succeeds in securing their approbation he is indeed happy. It is the knowledge that he has secured this, in spite of many shortcomings of which he must himself be only too conscious, which gives its real value to such distinctions as admission into the ranks of the Royal Academy or the very high compliment you have just paid me by making me the recipient of His Majesty's Gold Medal.

May I add that I am particularly touched by the fact that you have bestowed your highest distinction on one who is not a member of your Society and one who—I almost tremble to say it—has even at times been an opponent of your policy : opposition however, I am happy to say, which has never caused any interruption of friendly relations between us ?

I can recall many instances of courtesy on the part of the Institute towards myself. On more than one occasion you have been good enough to nominate me, though not a member of your body, to select competitions for great Government or municipal buildings. I have often at your invitation had the pleasure of listening in this room to very able addresses, of taking part in the discussion that followed, and occasionally of reading Papers myself at your Meetings. I rejoice, therefore, to think that the matters on which we differ bear a very small proportion indeed to those on which we are agreed. Although I remain, and I fear must still remain, an incorrigible unbeliever—some will perhaps say a perverse and a hardened unbeliever—in the possibility of discovering an artist by the process of examination; and, although some may think that I attach an undue and extravagant importance to that independence of statutory qualifications, that freedom from the bonds of strict professionalism to which, in my humble opinion—whether I be right or wrong—the British School of Architecture is indebted for that proud position which it holds, and I think rightly holds, among the schools of Western art which possess a less measure of freedom than that which we enjoy, still, however we may differ on these points, I feel sure we are all equally devoted to the noble art we profess and are equally desirous of promoting its true interests.

I will not call architecture the greatest of the arts, for in true art there is no greater and no less. The only distinction I recognise is that between good art and bad. We may, however, claim for architecture that it is the only necessary art, and as such it must always be of supreme importance to human society. It is an art that was compared by, if I am not mistaken, Madame De Staël, to "frozen music." We might, I think, also describe it as the "poetry of construction."

It resembles poetry by the various and indescribable manner in which it affects the mind. Every man will be able to recall certain lines of a great poet which touch him in some unaccountable way. It need not be the idea they convey. It may be the mere music of the words, or simply the harmonious arrangement of the sentences, but they awaken a thrill within us that we should find it very hard to explain. And yet the favourite passage which moves our very soul may leave another lover of poetry quite untouched.

It is the same with music. The suspense of some discord, the dying fall of some cadence, may play upon the very heart-strings of one hearer and "dissolve his soul in ecstasy," while the same passage will leave another lover of music quite calm and unmoved.

And so with architecture. It appeals in various ways to different people. It appeals to the same people differently at different times. No one can say why certain buildings appeal to him above the rest, while to others they seem to have no pre-eminent claim on our admiration. For instance, to me the most sympathetic interior among our English cathedrals is that of Exeter. I cannot tell why. I have often tried to understand why, but I have never been able to arrive at an explanation, and I can quite believe that my preference may not be shared by anyone else in the room. It is as impossible to say why certain lines and certain proportions in a building, certain arrangements of void and solid, of wall and window, buttress and doorway, certain refinements of detail, should awake within us sensations of majesty, awe, or loveliness, while others of equal pretensions leave us unmoved, as it is to say the same of a poem or a sonata.

The architect then is a poet, for architecture touches in a special way the poetic sense. What is a poet? He is the *ποιητής*, the maker, the creator, the man to whom it is given to realise in terms of sense the conception of his imagination, either in language with the man of letters, or in marble or stone, brick or wood with the architect and the sculptor, or on canvas with the painter. It is his power of doing this which distinguishes him from other men, and it is a power which, though it may be fostered and cultivated, can never be implanted where it does not already exist. Like the poet the artist is born not made. He must have in him that spark of imagination which education may fan into a flame but can never kindle if it is not already there. It is no kindness to encourage a student in whom this spark of the divine fire is lacking to persevere in a calling for which he has no natural qualifications, and I observe with satisfaction that in the latest schemes which have been put forward for the education of young architects it is suggested that students who show no special turn for art should be advised to take their abilities to some other pursuit. But when the spark of imagination is present the passion for creation becomes the dominant motive of a man's life. The true artist can no more refrain from design than the poet from singing. More fortunate than other men, his calling is not only his means of livelihood but his supremest pleasure without which life would lose its savour. Without enthusiasm nothing great is done in art, but when the artist has his heart in his work he must be unfortunate, indeed, if he is not able to leave behind him some work which will entitle him to the grateful remembrance of posterity.

Once more, Sir, let me thank you and the great Society over which you preside, for the high honour which you have done me, an honour which I shall always consider one of the highest to which an architect could aspire.



CONGRESSIONAL LIBRARY, WASHINGTON. (Messrs. Smithmeyer & Pelz, P. J. Pelz, E. P. Casey, architects.)

THE MODERN RENAISSANCE IN AMERICAN ARCHITECTURE.*

By C. H. REILLY, M.A.Cantab. [*A.*], Professor of Architecture, University of Liverpool.

MY only personal and first-hand impressions of American architecture were gained on a six weeks' visit to the eastern States in the spring of last year. My impressions may be said to have begun on the boat from Liverpool to Boston, if one may discount at once, as indeed one may, the average Englishman's idea that all American buildings are sky-scrapers, and that what art there is consists in a series of engineering feats by which the towers and spires of Europe are daily made to look insignificant and silly.

On board I soon found, to my surprise, that the ordinary American man or woman whom I there met knew not only the names of the architects in their own towns and their chief buildings, but also where in the States I should find, say, the latest work of Messrs. M'Kim, Mead & White, or of Messrs. Carrère & Hastings. This interest by the general public, which the rest of my visit confirmed, is very striking. New buildings—largely, no doubt, as the more obvious expression of national growth and prosperity—are objects of intense public curiosity; the daily papers not only illustrate them profusely, but give the careers of their designers, treating them as public benefactors, or the reverse, with a highly salutary frankness; while papers like the *Architectural Record* exist and flourish with the express object of feeding and stimulating this interest among the public at large. Increasing travel in the Old World has helped in the same direction, and if "to lick creation" is still the childlike ambition of the average American citizen, it is not a bad thing when that citizen is an architect, with all the resources of a millionaire client at his disposal, pitting his work against the master buildings of the world, and that to an audience daily becoming more and more able to appreciate the subtilties of our most abstract art. Before I visited the University Club at New York, by Messrs. M'Kim, Mead & White, I was not a little amused to be told by an unemotional Scotch architect practising in New York that I should find in this club a palace worthy to rank with the Farnese, the Massimi, or any of the great Italian palazzi, but after I had visited it I was very much of the same opinion myself. It is a commonplace to say that no art can flourish unless it makes some sort of popular appeal, and American architects are to be congratulated on the enthusiasm they have called forth—an enthusiasm which is now spreading in friendly rivalry from town to town, till each claims not only finer buildings than the other, but finer combinations and groups of buildings, finer open spaces, boulevards, and squares, finer dreams for the future, which are fast crystallising into definite town plans.

Looking at the matter historically for a few minutes, it will be remembered that the immense material prosperity which is now inseparable from our idea of America is a matter of the last twenty years or so. Curiously enough—for art and wealth but rarely walk hand in hand—architecture has during the same period shown its most

* From a Paper read before the Architectural Association of Ireland, 8th February 1910.

distinctive products and reached its finest results. Of American buildings at least "the more recent the less decent" does not hold, whatever it may do elsewhere. And this cannot be solely accounted for by plentiful opportunity. The same wealth has been at the disposal of the painters and sculptors—and where are they? The few that have achieved distinction belong more to Europe than to America, and remain there. To find the reason we must go further back and trace the system under which both American architecture and American architects have grown up.

To begin at the beginning, the colonists—English, French, and Spanish—had to establish themselves in a land destitute of any ancient monuments. It is difficult for us, with the call of the past always in our ears, to appreciate what this meant. No previous emigration in the history of the world presents a comparison. The Dorians, as Professor Hamlin pointed out in a Paper recently read at the Institute, when they overran Sicily and the south of Italy, were planting themselves and their temples in a land of hill and vale not unlike the Peloponnesus they had left. The vast distance over the ocean travelled by the American colonists brought them to such new conditions of mountain range and virgin forest that any actual reproduction of the architectural forms they had left behind was an impossibility. The material readiest to their hands, as it still is in all but the heart of their cities, was wood, and into this they had to transmute the stone forms they could remember, or could recover from such catalogues of still death as Chambers' *Civil Architecture*. Fortunately, perhaps, at this period there were few or no professional architects, and in the New England district, where our own forms prevailed, the work of building the timber houses fell, naturally enough, into the hands of joiners and carpenters. The result was that the Georgian architecture of Liverpool and Dublin received in America the long proportions, the delicacies of line and moulding we now call Colonial. No doubt such details as marble chimney-pieces were imported from the Old World, but the distinctive air of sunniness, elegance, and lightness, to which the lofty porticoes of wooden columns, some twenty diameters or more in height, so much contributed, was due to that sense of fitness of design to material which every good craftsman left to himself sooner or later develops. The period of colonial architecture was followed by one of rather ponderous and dreary classic, in which the Greek orders, just coming into fashion in England, were considered a necessary adjunct to any public or semi public building. The best work at this time fell into the hands of Government engineers, whose knowledge of architecture was limited by the conception, as Mr. Swales has pointed out, that a Greek Doric order was the hall-mark for a customs house or treasury, and a Greek Ionic for a church.

Then followed, about 1840, the spray of the Gothic revival; the wave broke itself in England. More than one English architect came out full of the new enthusiasm and did not a little work. The lack, however, both of mediæval monuments to form a background, and of a strong religious revival, such as there was in England, to provide a motive power, prevented any notable achievements. The mass of the work done at this time was of the crudest description. I saw Gothic churches in the best streets of New York which would disgrace a Welsh Baptist community, than which we know no lower level. This Gothic, however, must not be confused either with Richardson's distinctive Romanesque or the peculiar perpendicular work of extraordinary picturesqueness and force which has been accomplished of late years by Messrs. Cram & Goodhue at Princeton and West Point. I may say in passing that this latter in its way seems to me almost as distinctive a result as the big marble Renaissance buildings of the last ten years, to which I mainly wish to draw attention.

After the Gothic movement came the discovery of gold in California, the Civil War, and generally a time of great excitement and mad speculation, when architecture as well as all else that made for culture and refinement reached a complete standstill. The pity of this was that it was also a period of increased wealth in the eastern States, so that a great deal of building was done the general character of which was bad imitation of one European style after another. "It was not enough to offer the public a choice between a Greek, a Gothic, or an Italian villa. Swiss chalets and Oriental kiosques were considered necessary for the due expression of the varied tastes of American democracy, and in certain cases, such as a house near Hartford, Conn., deliberate attempts were made to combine Classic, Gothic, Italian, Swiss, and Oriental features into a single building." *

This was indeed the darkest hour of American architecture, but it was also the hour before the dawn. In 1858 Richard Morris Hunt returned from Paris, where for ten years he had been a student of the Ecole in the *atelier* of Hector Lefuel. Imbued with French methods, he at once started an *atelier* of his own, and from this single step the rise of modern American architecture can be traced. Among Hunt's first pupils were George B. Post, Charles Grambril, Professor Ware, and Henry Van Brunt. In 1864 Ware and Van Brunt migrated to Boston, and though the taste of the former, at any rate in those days, was for Victorian Gothic, they started an *atelier* of their own. In the next year the great Boston Institute of Technology—probably the finest technical institute in the world—was founded, and, with a logic which

* *Architectural Record*, January 1910, p. 16.

was all the better through not being too exact, a School of Architecture was added to round off the scheme of the sciences. In this way was started the school which in a few years was to become, potentially as well as numerically, the greatest outside Paris, the school which still exercises to-day the most vital influence over a whole continent. Ware was asked to become its first professor, and owing to the ideas he had imbibed in Hunt's *atelier*, in spite of his Gothic predilections, he collected money and started for Paris to study at first-hand the methods of the great École. He returned the next year, and in the following, 1868, the first regular school of architecture in America was opened with some eight to ten students. The school now numbers 200, drawn from all parts, including our own colonies, and the length of the course is five years. In 1870, two years later, the Cornell School was started by Professor Babcock, and in 1881 Ware moved to New York, to start the great school of the Columbia University. Pennsylvania, the third biggest, was founded in 1890; and Harvard, the richest and best equipped, just ten years ago. To-day there are fifteen to twenty large schools, with numberless smaller institutions, and, in addition to all, there is a Beaux-Arts Society, which by its competitions and scholarships, undertaken alike in schools and private *ateliers*, is ever inducing a higher standard of draughtsmanship and an increasing facility in design.

I have sketched the building up of this great educational edifice because it seems to me to be the secret of the renaissance of American architecture. The influence of a definite system by which all the young architects are trained along the same lines should obviously show itself in greater uniformity of character and greater consistency of detail, and these are exactly the points most noticeable in modern American building. For by their system of teaching design the schools have narrowed but deepened the channel, and thereby strengthened the current of architectural thought, so that instead of spreading itself out in a vast variety of styles, as it does here, it has for the last ten years been spending its force, as it did in Grecian days, in perfecting and refining a few definite and allied types. And when we remember that this is going on over a vast continent, with building opportunities unrivalled since the days of the Roman Empire, by a versatile race whose agile intelligence has been clarified by a system of training, who have at their disposal the finest building materials in the world—white marble, stone, and bronze—for everyday occasions, is it to be wondered at that the progress has been rapid?

But you may justly ask, how is it, if the schools are of such recent origin, they can have had so immediate an effect?—at present only a few of their graduates can have reached positions of influence and practices of any great size. The answer to that is to be found, I think, partly in the sublime confidence of youth, which tells more in a new country than it does here, but mostly in the different conditions under which architectural work appears to be done. In offices where there are 50 to 100 assistants it is impossible that the chief or chiefs can design at anything like a sufficient rate to keep the assistants employed, were the latter mere draughtsmen, tracing, copying, or enlarging the exact details of their masters. This is not the case in America any more than it really is in the larger offices in England, only in America the fact is more openly acknowledged. On the doors of Messrs. M'Kim, Mead & White's office in New York are to be seen, first, the names of the original partners, then the names of the more recent partners, and lastly, and most honourably of all to the firm itself, the names of the chief draughtsmen. As a leading Chicago architect, from whose office comes some of the best work in the States, said to me, "It is my province to give the general ideas, the tradition and inspiration governing my work, but for the rest I am the critic of my assistants' interpretation of them." How different from our own eclectic methods, from Mr. Norman Shaw carrying out his not inconsiderable practice with the aid of a pupil and an office boy, and sending away the original drawings because he had no one to make tracings. What we may then in contrast call the American system is only possible with a highly trained staff, and, more than that, with a staff trained in a definite tradition. This is exactly what the American schools give, in spite of the somewhat fallacious claim to catholicism printed in their prospectuses. The whole system, as far as I could ascertain, consists in a steady drill in one type of design, which we may roughly call French classic, though it is classic pruned of recent French extravagances—the *tour de force* and *l'art nouveau*. Whatever historical lectures there may be, the real work of any school of architecture is necessarily the work done on the drawing-boards. It is a striking fact that in all the larger American schools they have a Frenchman, often a *proxime accessit* to the Prix de Rome, under the title of Professor of Design, teaching in the studio. The head of the school, now that the schools have grown to such large proportions, is generally too immersed in administrative duties to do much teaching beyond mere lecturing—to my mind the least effective form teaching in a fine art can take.

The work of the American schools, then, which is done under French direction, naturally follows Paris methods. In his four or five years at the school the student carries out a series of progressive designs, beginning in his first or second year with compositions in the orders. Then he passes on to what are called "dictation" problems—that is, problems in which the scope of the problem is strictly limited—*e.g.* a staircase or an entrance

hall to some definite building, like the Farnese Palace. These problems are designed in their range and order to add to the student's vocabulary—that is, to his knowledge of detail—and before each such problem he is turned into the library to consult specified books and drawings. Good libraries are an even greater requisite in America than they are with us, who have old buildings at hand for our students to measure. By stages such as these the student passes to the design of complete structures, but throughout his whole course the designs he makes are divided into two types—the sketch design, made at a single sitting of, say, twelve hours, and the large design, for the completion of which a month or more is allowed. He finishes his student career as far as his American school is concerned with a design called his thesis design, on some monumental subject, such as a large railway station or a group of public buildings, chosen by himself and finished in a set of highly-rendered drawings. On these drawings, and on the senior work generally, the student is allowed and encouraged to employ the juniors to put in repeats and other mechanical work—an excellent system which does much to bring on the younger men. All through the course great attention is paid to draughtsmanship both in the rendering of architectural drawings and in drawing from life. The teaching of the detail of construction, save at Harvard, plays a somewhat small part, but I presume a sufficient one, as the students pass direct from the schools to salaried posts, unless they go to Paris or Rome.* Apprenticeship is practically unknown. The fact is, I suppose, that construction in America in the detailed literal sense, not in the large ideas of what is constructable, which are inseparable from our art, has become, as it is becoming with us, so much a matter of specialists that the ordinary draughtsman has very little of it to show on his drawings. The big firms of architects all keep engineers in their offices, with special engineering draughtsmen under them. It must not be imagined, however, that an American set of working drawings is in any sense an impressionistic sketch of a building. They are indeed very much the reverse—too much, one might venture to suggest. Owing to the absence of bills of quantities, not only has the size of every stone to be shown, but all decorative details, lamps, grills, door furniture, &c., have to be completely drawn and rendered in such a way that the contractors can give accurate prices for them.

The schools then must turn out highly efficient designers with great knowledge of detail, and five years is not too long for this. Heavy work though is expected from the students, and apparently obtained. The system of continual competition, against which a good deal might be said, certainly means work at high pressure. I returned to the draughting rooms one night at Cornell at 10 o'clock and found them more than half full of hard-working students. I was told too that these same men would turn up at lecture at 7.30 next morning.

Another means of stimulating interest is the adoption within the school itself of different *ateliers*. This is the system at Columbia, where there is the school *atelier*, the M'Kim, Mead & White *atelier*, and the Carrère & Hastings *atelier*. To these latter the firms mentioned give their criticism, and the competition, therefore, is not only between the individual students, but between the different *ateliers*. It seems to me that the practice of eminent architects having their *ateliers* as well as their offices, which, in conjunction with or in addition to the school system, is the case in America, is a most excellent one. On the one hand it prevents the student from becoming academic in the bad sense—unreal and unpractical—and on the other hand it keeps the eminent architects themselves from becoming eminent fossils. There is no more refreshing exercise to the imagination than criticising and helping in a number of solutions of the same problem. Facility in design like facility in draughtsmanship can only be maintained by constant exercise, and in a sense each student's design is an exercise to the teacher. At any rate I found that it was the best men in America, and the best only, who had *ateliers* of their own. Why not found them here as a supplement to your new school?

If, then, it is a true contention that the scholarship obvious in modern American architecture can be traced to their educational system, it must not be supposed by implication that there are not great and dominating personalities among American architects, as there are among us, whose influence is widespread. The chief difference is, I think, that certain architects and firms in America have stood for large tendencies, whereas with us they have stood for individual idiosyncrasies. For instance, Messrs. M'Kim, Mead & White stand for classic architecture derived more directly from late Italian and Roman sources; Messrs. Carrère & Hastings for eighteenth-century French. Then there is the group of younger men, with Messrs. Hornbostel & Palmer at their head, whose classic architecture is nearer akin to modern French. But in none, I fancy, can we see the same individual touch that so unmistakably marks, say, a Rickards or a Lutyens with us; and on the whole I am not sure that they do not, in their peculiar circumstances and as a nation, gain by this. The higher level of uniformity makes for progress. The strong individuality of Richardson led nowhere: he left no school behind him; whereas the refining influence of M'Kim is everywhere apparent.

Let us take, then, the work of Messrs. M'Kim,

* At this latter place there is now, thanks largely to the late Mr. M'Kim, a fully equipped American school.

Mead & White for a moment and consider it. The firm was founded in 1880. Charles Follen M'Kim, whose death we may deplore as the greatest loss our profession has sustained of recent years, received his early training in Paris. Messrs. Mead and White were draughtsmen in Richardson's office, though they too had had some Paris training. Although by the mass and quality of their work they had already achieved the position of the leading New York firm till 1895, in looking back upon it their work must be considered as mainly experimental. Up till then the definite tendency so marked in their later buildings is missing; always refined, they do not evince any particular architectural faith. But with the erection of the Villard Houses in Madison Avenue a complete change occurs. They are a group of magnificent seventeenth-century Italian palaces, fine and strong as the Farnese itself, and crowned with a very similar cornice. From that time down to the present day we may, perhaps, find a prototype, and generally an Italian one, for each of their larger structures. Every year, I was told, one of the firm went to Europe and came back enthusiastic over his latest find. But there seems to me to be little harm in this when it is the *effect* which is copied rather than the exact *form*. The result with them has never been the lifelessness of an actual reproduction. And it may be argued that after all the number of possible main effects in classic architecture is strictly limited, as certain critics have maintained of dramatic plots. Take the Tiffany Building in Fifth Avenue. Here is a square site to be occupied by a building for the display, in a series of galleries, of jewellery, silver, and glass. The owner is a Venetian. What more natural than to turn to the finest of the square palaces facing the Grand Canal, the Grimani, for the same general effect? Such a thing as this is more than ever justifiable in a new country, with its tradition yet to make. Some one had to set a standard. Travelled Americans have seen the monuments of the Old World and call for equal buildings at home. They have also, what we no longer appear to have, the means to pay for them. It was far safer to work on an old scheme, carrying it through with the finest detail, than, on the huge scale demanded, to execute a bad original. If the main idea is borrowed, the detail is always perfectly appropriate and full of the delicate scholarly touches. To show the extent to which this is carried I may mention that a member of the same firm told me that in their great Pennsylvania Railway Station, still in course of erection in New York, they are introducing in its long colonnades the slight upward curves of the Parthenon both in the steps and in the entablature.

Perhaps after all, though, it is their domestic architecture which shows more clearly the course they are steering. Till fourteen years ago they designed, like most other people, picturesque houses, relying for effect on high-pitched roofs, gables, and chimneys outlined against the sky—houses often full of charm, but with no very definite character or style. It might be thought that among the buildings of a new country the country-houses at least could be independent of tradition. But that is not M'Kim, Mead & White's view. Since 1895 every house they have built has been a formal composition in keeping with the rest of their work. Yet these latter houses are not barren examples of formal grandeur. They have succeeded in building houses for rich clients without either handing the rooms over to a professional decorator or losing that quality of simplicity and restraint which makes of the stateliest Georgian mansion a pleasant home to live in. The majority of these country houses are in brick, and based on English Georgian or Colonial types, but with a more masculine vigour of detail than the originals, and that too without any decline from the strictest standard of good form. Indeed that is everywhere their main characteristic, and in America to have always stood for good taste and not for advertisement is in itself, I take it, a somewhat notable achievement.

Work such as I have tried to describe obviously calls for an office equipment somewhat different from our own, and it may be interesting to sketch briefly the offices in which it is done. Roughly the rooms occupy the whole of the twentieth floor in a large rectangular block in Fifth Avenue. On entering, a coloured manservant leads you to one of a suite of reception rooms arranged along a side of the rectangle. These, which vary in size, are furnished in good taste with fine specimens of antique French and English furniture. The special rooms of the members of the firm are beyond again. The whole set give on to an immense drawing office, capable, I should say, of accommodating seventy to eighty draughtsmen. These latter are arranged in groups according to their work, and attached to each group is an engineer. The most striking feature, however, in the room is the stack of books—large folios chiefly—in special bindings, strengthened for use on the desks. The books are no ornament of the master's private room, but in daily use by the men. Copies of Canina and Letarouilly were lying about. Who nowadays uses such works in England? Most of the men employed were graduates either of the Paris or of one of the American schools, and I gathered that, discounting the greater cost of living, their salaries were more than double what we can afford to pay. £500 to £600 a year was not an unusual sum.

Turning now to the work of Messrs. Carrère & Hastings, the second most prominent firm, although both partners came originally, like so many other leading men, from Mr. M'Kim's office, we see at once a distinct change. While the parent firm have ranged in a wide eclecticism over

the whole field of Roman and Italian work, these latter have restricted their scope to that narrower channel of the main Renaissance stream which flowed through France in the eighteenth century. In doing this they have had with them the sympathy of the large mass of the younger men trained at the École des Beaux-Arts or under the shadow of its ideals. We find, therefore, in their work a more specified appeal, a greater consistency of thought than in that of the older firm. We may take perhaps the salient characteristic of all work derived from the French school to be the dominance of plan, its perfect economy and appropriateness. No sacrifice of plan to elevation is conceivable to a French-trained architect; he would rather, as Carrère & Hastings have themselves done in one or two instances, leave some portion of a façade unresolved and unbalanced, if the plan so dictated and a complete solution had not presented itself. In the new National Theatre, which they have just erected, the attic story on either flank of the circular corner feature differs in treatment; the unfortunate result, as seen from the angle, can only be accounted for, though hardly justified, by different internal requirements. While in M'Kim, Mead & White's buildings the total external effect—the thing as a monument—seems to be the first thought, in those of Messrs. Carrère & Hastings one is conscious all the while of an effort to solve a definite and very often a new and distinctly American problem. In detail their work perhaps lacks the scholarly distinction the older firm still maintains, but it is never weak or jejune. In no office is more time and energy spent in studying a design before its execution. For this purpose they make the most elaborate and beautiful models; so beautiful that they may themselves become a snare and help to petrify the ideas which would have remained in a more fluid state on paper.

I have taken the work of these two firms because not only are they the most conspicuous, but because I think in them also one sees the two main tendencies at present at work in America; the one representing the Italian and English Classic (for we also derive from Palladio), and the other the French, though in the latter work, especially in that of the men who have been through the American schools, it is not (and one may be thankful for it) the French architecture of the last ten years. By founding their schools exactly when they did, the Americans were happy in avoiding the late rococo and *l'art nouveau* movements, which to my mind have for the moment so much deteriorated modern French architecture. The solid basis of planning, however, on which French work always rests, will no doubt once more, when fashion again changes, reveal the noble architectural forms that for the moment lie hidden under masses of extravagant detail. But till that time arrives America has seized the lead, and as far as I can judge has established an architecture which, while satisfying the most exigent of modern requirements, is yet the conscious heir, as ours, let us hope, is in part the unconscious, of those forms and thoughts which, born in Greece more than 2,000 years ago, have been for the last four centuries, and must always be, with negligible deviations, the spring and motive of our life and art.



Office Building, House of Representatives, Washington. (Messrs. Carrère & Hastings, architects.)

THE ANCIENT PAINTED GLASS OF YORK MINSTER.*

By GEORGE BENSON [A.].

THE purpose of this Paper is to trace briefly the development of the glass-painter's art as illustrated in the windows of York Minster.

The first mention of glass in connection with the Minster occurs as early as the year 669, when Wilfred, Bishop of York, filled the windows with glass, which, his biographer remarks, "excluded the birds and rain and yet admitted the light." The windows had formerly been provided with linen or boards pierced with many holes.

The glass was made in small pieces, but by adding pieces held together by lead it became possible to fill in a window of any size, and eventually leaded lights came into general use. The glazier dealing with plain glass had to rely for his artistic effects on his leads, which he arranged in geometrical patterns. The nave clerestory windows show what can be done in this manner. What a charming bit of work it is—yet the glazier was not satisfied. The pre-Norman Minster would have its walls enriched with colour and frescoes. Amidst so much colour plain glass interfered with the harmony of the colour-scheme. The glazier was induced to try colour on the glass. The glass was stained throughout by fusing oxides of metal with it in the furnace. The early coloured glass windows were formed of pieces of different tints arranged in patterns similarly to mosaic-work. The patterns assumed geometrical forms as they increased in size, and their outlines were widened into margins formed by narrow strips of glass.

The window openings in the Norman Minster consisted of a single light finished with a round head. The windows were adorned with coloured glass in leaded lights. When the Norman nave was taken down, about the year 1295, some of the glass was preserved in the new nave clerestory. The designs consisted of central panels about 21 inches in diameter, and were formed by combinations of squares and circles. The central part was diapered horizontally and vertically or diagonally, and the margins were adorned with small circles, chevrons, saltires, and lozenges.

A great advance in decoration was the introduction of foliage, which was treated in the true spirit of art by being conventionalised. The foliage has been considered to be based on either that of the honeysuckle or that of the lady's mantle. The late John Browne, artist and antiquary, of York, paid great attention to the subject, and was convinced that the foliage represented was that of the lowly plant, the Water Avens, or *Geum rivale*. The plant had a great reputation for its healing properties—whence its name *Herba Benedicta*, "the Blessed Herb," "the Healer of the World"; it was therefore chosen to symbolise Our Blessed Lord.

The border became an important feature in the designing of Norman glass work. There are a number of fine borders about 11 inches wide, in which hexagons, semicircles, separate or intertwined, occur; also interlaced ovals, amidst which is the conventional foliage of the *Herba Benedicta*. There is a portion of a beaded octafoil compartment with a rich border. One border shows that the artist had felt his design fettered by the geometric framework, and had dispensed with it so as to gain a freer treatment. His design consists of a rising stem of upright leaves, from each of which on either side spring leaves, fruit, and triple stalks bearing trefoils.

Subsequently the geometrical compartments were occupied by a picture, at first a single figure, and afterwards a subject in which several figures appear, either in a panel or a series of medallions. A panel 2 feet 4 inches wide contains one figure of a Jesse window. It depicts a man seated between branches, which he grasps on either side. It is a beautiful piece of work, showing that the art of glass painting had attained a high standard. From the observation of similar work at Chartres and St. Denis near Paris, it is considered to have been made about 1130. The Jesse, or Tree of Jesse, is a representation of the genealogy of Jesus, in which the ancestors are placed amidst foliaged branches.

A panel (fig. 1) 2 feet 5 inches wide formed one of a series of medallion subjects, and depicts Daniel in the lions' den. Two lions are laid looking towards Daniel, who is standing and holding his hands to receive from Habbakuk the cake and bowl of pottage. The scene is from the Apocrypha.

A panel 10½ inches wide contains the figure of a sainted bishop seated under a round arched shrine. This panel is the forerunner of the later figure and canopy treatment. The figure probably depicts St. Richard, Bishop of Chichester, who died in 1253. The Church at Aberford is dedicated to him.

In the Norman coloured glass the ornament is drawn with vigour; from stiff foliage rise bold leaves which fold over gracefully and finish with curved indented edges. The ornament is emphasised in bright colours of red, green, and yellow on a plain blue ground, and gives to the whole a rich appearance.

Round-headed windows were succeeded by pointed ones. At first these consisted of a single opening. Later the windows were grouped into

* Read before the York and Yorkshire Architectural Society, 10th February 1910.

2, 3, or 5, as in the Five Sisters window. In the latter the artist-glazier had to grapple with a new problem; he had a group of five lights, each 5 feet 1 inch wide by 53 feet 6 inches high, to fill in with painted glass. With the instinct of the decorative artist he worked it out in an eminently satisfactory way.

These windows are a great contrast to those of the Norman Minster. Instead of all bright colours, these are only used in outlining the medallions which rest on a mass of much lighter and more naturalistic foliage outlined in white on a brown ground. The colours used are ruby, blue, green, and yellow. The medallions are varied in form in each light and alternate in colour. The borders have foliage similar to the diaper with a coloured margin, and in each light the treatment is varied. In the foliage of the central light there appear the ivy and maple leaves. The fourth and fifth lights have borders with foliage trailed through a zig-zag line, the fifth has in addition an inner margin. In the fifth light the medallion consists of a coloured circular border with trefoil foliage, enclosing an octafoil. The window has a brownish-green look in the mass and resembles tapestry; this has given rise to the tradition that five maiden sisters worked the patterns in tapestry, hence its name of the Five Sisters.



FIG. 1.—NORMAN PANEL INSERTED IN FIVE SISTERS WINDOW.



FIG. 2.—SUBJECT PANEL FROM WINDOW IN CHAPTER HOUSE.

As already indicated the "Five Sisters" consists of five windows separated from each other by clustered shafts. Mullions divide those in the Chapter House, and each window consists of five lights with a traceried head. The "Five Sisters" consists throughout of a light uniform tone, which is termed "grisaille," and has a diaper of foliage conventionally treated. The windows in the Chapter House have alternately grisaille and medallions of coloured subjects. The grisaille ground, however, is white, and the conventional treatment of foliage gives place to the naturalistic, the foliage and fruit of Nature, as the maple, thorn, ivy, strawberry, oak, and hop, being closely imitated.

In the Chapter House heraldry is introduced and largely used as a decorative feature in the painted glass of the tracery and in the window borders. The shields emblazoned are those of Edward I. and the members of his Court. There are seven windows, each containing twenty subjects on the Life of Christ or of some saint, as the "Annunciation" panel (fig. 2), which exhibits the fleur-de-lis and also the border depicting ivy. In the south-western window each light commemorates a different saint and depicts four scenes from the saint's life. In the first light each subject is under a canopy, which architectural feature is now introduced and henceforth becomes the leading feature in the design of painted glass.

The vestibule windows have narrow lights. These are diapered similarly to those in the Chapter

House and have two rows of figures under canopies and shields in the base, and heraldic borders.

The treatment of the nave windows in general resembles that of those in the vestibule. The vestibule windows vary from two to five lights, but those in the nave (fig. 4) are uniform, having three wider lights with three quatrefoils above. The nave windows have white panels outlined with natural foliage, alternating with two rows of coloured subjects. The subjects are under large golden tabernacled canopies set on a rich ground of either red or blue, and have a brilliant appearance. An inscription crosses the base of the lower subjects. In the Chapter House the tracery is adorned with shields, but in the nave the shields are placed on the grisaille panels. The earliest nave window was given by Canon Peter of Dene in 1306. It illustrates events in the life of St. Catherine, and the base of the central lights contains a figure of the donor. From the importance of its shields of arms and representation of the King and members of the Court in surcoats, it has been styled the Heraldic window. Adjoining is the Bellfounder's window, given by Richard Tunnoc, bellfounder of York. The upper subjects are from the life of St. William of York. The lower band shows the moulding and



FIG. 3.—GREAT WESTERN WINDOW.



FIG. 4.—NAVE, WEST END, SOUTH AISLE.

casting of a bell, and in the central light Tunnoc is represented kneeling before an archbishop. A window on the opposite side was given by Robert of Ripplingham, Chancellor of the Minster from 1297 to 1332. The adjoining window was given by Archdeacon Mauley. The subjects are the martyrdoms of St. Stephen, St. Andrew, and the Baptist. Below in the centre is a picture of the donor of the window, and on each side are represented his brothers as warriors. This window was restored in 1903.

The clerestory windows are of five lights. They are filled with plain geometrical leaded glazing. A band of coloured subjects in geometric panels crosses the upper part, below was an inscription, whilst the King's shield between four of his nobles occupied the base.

In the western windows the separation of the niched figures by white diapered panels is abandoned. The Great Western Window (fig. 3) has the niched figures piled one upon another.

In the side windows (fig. 4) the canopy is the dominant feature. A single figure and lofty canopy fill in the whole light. The symmetrical treatment of the whole window is departed from; the lights are not repeated; the central one nearly dispenses with the canopy and is occupied to the top with the subject, with a small panel below. These windows are remarkable as regards their colouring for the extensive use of ruby and amber, which gives them brilliancy when viewed with the afternoon sun behind.

The Great Western Window of eight lights (fig. 3) depicts a row of archbishops (fig. 5) with the Apostles above, to complete the number eleven; three compartments show an additional face. The third row depicts the Annunciation, Nativity, Resurrection, and Ascension, each subject under tabernacled canopies occupying two lights. At the top of the two central lights are crowned figures of Christ and His Mother. Archbishop Melton, in 1338, gave 100 marks for this stained glass



FIG. 5.—DETAIL, GREAT WESTERN WINDOW.



FIG. 6.—JESSE WINDOW, CHOIR, SOUTH AISLE.

window. The white glass cost 6*d*. per foot, and the coloured glass 1*s*. per foot. An agreement was also made at the same time to glaze the two side windows for 11 marks each. That in the north aisle has among its figures St. Mary and the Divine Child. The southern aisle window (fig. 4) depicts the Crucifixion, with a beautiful foliaged background in which small figures appear.

Another window of this period is in the southern aisle, and has under canopies three large figures of Saints Stephen, Christopher, and Lawrence. There are some windows of similar date in the choir. The first, as one enters the southern aisle, contains figures of prophets, under canopies, with subject panels depicting incidents in the Life of Our Lord.

The Lady Chapel southern clerestory has two windows of similar glass; one depicts five apostles and the other various saints. The earliest glass for the Lady Chapel was made about the year 1380. It is in the southern aisle. The design of the canopy is based on that of the castellated architecture. The figures represent King Edward the Confessor between a pilgrim and St. John.

Two of the northern clerestory windows picture apostles or prophets with scrolls containing a portion of the Creed or a quotation from a prophecy. On the opposite side a window depicts five prophets bearing similar scrolls.

In the southern aisle of the choir is a Jesse window (fig. 6). On a dark green diapered background is a white vine stem intertwined and forming a series of panels in which stand prophets.

The Great Eastern Window was painted during the years 1405 and 1408 by John Thornton of Coventry. Old Testament history, from the Creation to the death of Absalom, is depicted in 117 compartments, and the Revelations of St. John are illustrated by 81 subjects. Each compartment is about a yard square.

The northern aisle of the Lady Chapel has windows of three lights, each containing a full-sized figure under a tabernacled canopy, with a subject panel below. The borders contain monograms. The "Scrope" Window has octagonal canopies, four stages in height, that of the base being niched with figure in front one, and angels at the sides. The next window has at the sides an octagonal canopy of two stages, whilst the central one consists of a tower supported by two heights of flying buttresses. The adjoining window has similar canopies, but varied in position.

The North-eastern Window side-lights have tall niched pinnacled canopies. The Heavenly Choir is depicted in the tracery. The corresponding window in the southern aisle has canopies consisting of a three-storied embattled tower supported by flying buttresses.

The Southern aisle windows have three-storied canopies on piers containing figures in niches; the central canopy is treated differently. The fourth window from the east illustrates events in the life of St. Thomas à Becket.

The choir clerestory windows contain much white glass and have figures under tabernacled canopies and shields along the base. On the northern side are windows commemorating Archbishops Scrope and Bowet.

The three windows in the northern aisle of the choir are similar in design. Each light has a large figure under a tabernacled canopy supported by piers niched and containing figures. Below are three panels illustrating events in the saint's life. These windows were painted about 1423, the first to commemorate Archbishop Bowet, the second was given by Canon Parker, who rebuilt Bolton Percy Church, and the third by Treasurer Wolveden. The Holy Family Window in the corresponding aisle is of similar design, but has only two subject panels below the large figure.

The St. William Window was erected about the same time, and contains 105 compartments illustrating the Life of the Saint of York. The window opposite depicts the Life of St. Cuthbert, in eighty-five panels, and was given by Cardinal Longley in 1437.

In the southern transept a window illustrates the *Te Deum*. In both transepts are figures of saints and shields. There are also a number of interesting "quarries." The Minster white glass of the fifteenth century is hard, but the earlier glass is much worn and corroded.

The York Freemen's List in 1381 and 1385 mentions "glasenwrights." In 1391 and 1402 glaziers were enrolled. In 1410 John Thornton was admitted a freeman of the City. Other glaziers were John Chamber, jun., Thos. Ros, John Newson, and Wm. Gent. The Minster Fabric Rolls mention in 1371 Wm. of Auckland, glazier, and from 1399 to 1418 John Burgh and John his servant, also Robt. Quarendon. From 1447 to 1578 the Pety family were the Minster glaziers: John Pety was chosen Lord Mayor in 1508, and died in office.

The Minster contains no less than three-quarters of an acre of mediæval painted glass, the largest collection in England. To the student of history these windows are invaluable; they show contemporary portraits of kings, queens, courtiers, ecclesiastics, warriors, and people in all stations of life. The lives of the saints as told by the windows are extremely fascinating. The variedly cruel deaths of the martyrs recall the struggles of the early Christians. The shields of arms depicted on the glass are of great value to the herald and genealogist. The exquisite diapered backgrounds, the composition of the subjects, the drawing of the figures, and the varied designs of the canopies with their wealth of colour and their brilliancy are full of instruction for inspiring the artist and designer of to-day. To get into touch with the artistic feeling of the old work there is no better way than to copy a little of it in water-colours on the spot.

TOWN PLANNING.

PAPERS COLLECTED BY THE R.I.B.A. TOWN PLANNING COMMITTEE.

XVIII. MUNICIPAL ART SOCIETIES.

By H. Inigo Triggs [*A.*].

If the administration of the Town Planning Act is to be a success in adding to the beauty of our cities it is evident that very much will depend upon the co-operation of all citizens, and especially of the members of the legal, medical, and architectural professions. There is, perhaps, no field in which the members of the Allied Societies may find greater scope for their endeavours in this respect than by stimulating in their different districts the formation of municipal art societies somewhat on the lines of the Municipal Art Society that is carrying out such excellent educational work at Hartford, Connecticut. This Society was founded in 1904, and its principal object, as set forth in its constitution, is "to conserve and enhance in every practicable way the beauty of the streets, buildings, and public places of Hartford; to stimulate interest in the scenic, artistic, and architectural development of the city; and to encourage a greater civic pride in the care and improvement of public and private property." There are three classes of members: Life, Annual, and Honorary. The Society is governed by a Board of Directors consisting of eighteen members, and there are twelve standing committees dealing with such subjects as the general city plan, civic centres and public buildings, exhibitions and competitions, finance, law, legislation, parks, thoroughfares, and playgrounds, street fixtures and advertising, &c. Those citizens, therefore, who are imbued with sufficient civic spirit to interest themselves in the welfare of their city, may easily find some sphere adapted to their own work. It is the duty of the various standing committees to investigate matters within the scope of their respective appointments and to report thereon through their chairman at the regular meetings of the Board of Directors. The Directors may also call upon the various standing committees for special reports at any time. The Society issues, from time to time, "Bulletins" upon important questions connected with the city. In a Paper read before the Society by its president, Mr. C. N. Flagg, the author thus describes the need for a Municipal Art Society and the objects which it should endeavour to attain:—

> The first modern Municipal Art Society in France——so far as I know—had but one member, Napoleon I. The second was a larger society as to membership. It had two members, Napoleon III. and Baron Haussmann. What these organisations accomplished, principally by an intelligent lay-out of streets and avenues, for the proper sanitation and beautifying, as well as for the civic economy of Paris, is so evident, and has been so widely published, that no comment is necessary as to the advantages which they procured for the city, and incidentally for the entire, more or less civilised, world.
>
> The incidental good came from the force of the example, and, as one result of it, we find that yesterday and to-day similar organisations have been, or are being, established in many of the principal cities of Europe and America, and wherever established have remained in force.
>
> Municipal art societies find authority for active existence by virtue of those privileges which in civilised communities go with the title of citizenship, through which certain important rights are conferred upon all citizens of good standing; and one of these rights is a voice which can be made to count as a factor in the suppression of certain popular evils.
>
> To define a form of popular evil I would say that at the present time the spirit of commercialism, excellent when well directed, is often twisted and misdirected in such a way as to affect the arts of architecture, sculpture, and painting, and all the art crafts adversely. Therefore the organisation of civic art societies, made up of persons who, under their rights of citizenship, will act intelligently in the interest of good taste in all questions touching the natural beauty and artificial ornamentation of the city, becomes a necessity, for it is only in this way that protests against sometimes fraudulent and very often innocent or ignorantly committed acts, resulting in monuments of ugliness and inconvenience, may be made effective. If such effective action is not taken by citizens when necessary, the city plan, usually less well protected, but quite as important as the park plan, may be awkwardly marred and one and the other abused instead of being reasonably controlled.
>
> A civic art society should be large, so that expert opinions in certain questions of municipal expediency may be had from members at reasonable cost, or at no cost, and also because the larger the organisation the more widespread will be its influence. It should interest itself not only in public sculptures and decorations, but in the grouping of public buildings, and in the architectural style of both public and private buildings, so that the conglomerate composition of such buildings will insure a conservation of harmony in the appearance of streets and avenues. It should be interested in streets, signs, parks, parkways, and in bridges, rivers, and harbours where they form a part of a civic scheme, and should in fact be interested in all matters involving questions of civic taste.
>
> The society should not interfere in any way with the rights or duties of the city's officers, but should co-operate with them wherever possible and desirable.
>
> It should be the ready and helpful friend of any worthy administration or commission regardless of party politics, occupying itself strictly and entirely within the limits of those functions which properly belong to it.
>
> It is a mistake to assume that because they are especially interested in questions of taste and beauty municipal art societies are likely to encourage extravagant expenditures. Quite the contrary is the case, and the fact that in the United States they are increasing in number and in membership points to the conclusion that organised attention to matters involving questions of taste inevitably results in a more economic adjustment of civic expenses and in an increase, not of the burden of taxation, but in the list of taxable property, that it adds to the health, comfort, and convenience of citizens, and invites a growth in population.

9 Conduit Street, London, W., 25th June 1910.

CHRONICLE.

The Royal Patronage and Gold Medal.

The King having been approached with regard to His Majesty's patronage of the Institute and the annual gift of the Royal Gold Medal, the following gratifying reply has been received :—

Marlborough House : 21st *June* 1910.

Dear Sir,—I am commanded by the King to inform you that His Majesty is graciously pleased to become Patron of the Royal Institute of British Architects, and that His Majesty will continue to present to your Society the Royal Gold Medal for Architecture.—Yours faithfully,

W. Carington,
Keeper of His Majesty's Privy Purse.

The Secretary R.I.B.A.

The late King : Message from the Queen-Mother.

The following message from Her Majesty the Queen-Mother, dated from Buckingham Palace the 20th May 1910, has been addressed to the Council in acknowledgment of the wreath sent on behalf of the Institute on the occasion of his late Majesty's funeral :—

"I wish to express my heartfelt thanks to all the kind donors of the beautiful wreaths and flowers which were sent as tokens of affection in memory of our beloved King.

Alexandra."

The Royal Gold Medal 1910.

The presentation of the Royal Gold Medal to Mr. T. G. Jackson, R.A., LL.D., took place last Monday before a numerous gathering of members and visitors, the latter including several ladies. As customary on these occasions, the Council had entertained at dinner that evening the Royal Gold Medallist himself and a number of distinguished persons who had been specially invited to attend the function. These included Sir Charles Lawes-Wittewronge, Bart., Sir L. Alma-Tadema, O.M., R.A. [*H.F.*], *Royal Gold Medallist* 1906, Sir Aston Webb, C.B., R.A., *Royal Gold Medallist* 1905, Messrs. Thomas Brock, R.A. [*H.A.*], J. J. Shannon, R.A. [*H.A.*], J. S. Sargent, R.A., the Provost of Eton, the Warden of Wadham, Professor Charles Waldstein, Litt.D., Mr. Basil Jackson, and Mr. R. A. Powell. A collection of photographs and drawings representative of Mr. Jackson's executed works was exhibited in the Meeting Room on the evening of the presentation. A melancholy interest will always attach to this year's Gold Medal in that it was the posthumous gift of the late gracious Patron of the Institute, King Edward VII.

The Retiring President : Vote of Thanks.

Mr. Ernest George's term as President expiring on the last day of the present month, advantage was taken of the closing General Meeting of the Session last Monday to give public expression to the appreciation which is universally felt for the excellent service he has rendered the Institute during his two years' tenure of the Presidential office.

Mr. John Slater [*F.*], rising to propose a vote of thanks, said : Ladies and gentlemen, as this is the last time in all probability that our present President will occupy this Chair—and perhaps as an old member of the Institute I may interpolate a feeling of regret to think that this is probably the last time that the Chair will ever be occupied in this room—I am sure that you would not think it fitting for us to separate without passing a vote of thanks to Mr. Ernest George for the way in which he has upheld the traditions of the office of President during his tenure of it. (Loud cheers.) It is, I believe, no secret that he had a good deal of hesitation in accepting the post, and that it was only by the pressure of much mild persuasion that he was induced to undertake it. But I venture to hope that he will never regret the two years during which he has been President, and that he will carry away many pleasurable recollections of his term of office. There is one branch of architecture in which, by the unanimous consent of other nations, England holds the palm, and that is what I may call our essentially autochthonous domestic architecture, and I am sure you will all agree with me that there would have been something lacking in the history of the Institute if a man who is so eminent an exponent of this branch of our art had not been enrolled amongst its Presidents. (Cheers.) I am equally sure that the annals of our Institute would be the poorer were it not for those Addresses with which our President has charmed us at the opening Meetings of the Session and on the occasions of our annual prize-giving—addresses which were replete with common sense and excellent advice, and which were enlivened with a quiet play of humour which is the President's own. These, ladies and gentlemen, are the positive merits of our President. I am quite sure that he will not misunderstand me when I say that his negative merits have been equally estimable. Mr. Ernest George has views of his own, and he has known how to

present and to press them at the Council Meetings. But he is essentially a man of peace. Polemics are unsuited and disagreeable to him, and sometimes, ladies and gentlemen, when we are in our working clothes we do have polemics here. We have a certain number of young members of the Institute who are young lions and who occasionally set up a rather formidable roar. Small blame to them! What is the good of being a young lion unless you can roar? (Laughter.) But whenever Mr. George has thought that it was in the true interests of the Institute that he should hand over the reins of the Meeting to one of its Vice-Presidents, he has invariably had another engagement! (Renewed laughter.) I am not joking. I have had a very long experience of this Institute, and I remember Presidents who would have insisted upon their right to preside on any occasion, and I think that Mr. George has shown a true wisdom and a true feeling for the interests of this Institute in not being present on occasions when he felt that someone else could do the work better. With regard to the personal relations between himself and the members of this Institute I think I can assure him, and I am sure that you will bear me out, that he carries with him the affectionate regard and esteem of those who did not know him before he occupied this Chair, and that he has won a warmer place than ever in the hearts of those who previously had enjoyed his friendship. (Cheers.) Whilst speeding the parting guest I may perhaps be allowed to express my feelings of satisfaction that Mr. George will be succeeded by a man who has done so much for the Institute as Mr. Leonard Stokes. (Cheers.) I am sure that we can all wish him a happy and prosperous and eventful year of office. Without more words, ladies and gentlemen, I ask you to pass a very hearty vote of thanks to the President for his conduct in the Chair.

Sir Aston Webb, C.B., R.A., *Past President*: Ladies and gentlemen, I have been asked to say a word or two in seconding Mr. Slater's proposal. I do not think he has been quite fair to me, for he has left me scarcely a word to say. But as I had the honour, I think, of speaking the first words of welcome when you, Mr. President, took the Chair, it is a pleasure to me to say a few words on your quitting it, and to express, feebly I am afraid, our great obligation to you for the work you have done for the Institute as its President. As Mr. Slater has said, we understood when you took the Chair that you had some little hesitation as to the way in which you would fulfil its duties. That, I may say, was a hesitation which was felt only by yourself. (Cheers.) No one else in the Institute had the least hesitation about it, and we were quite sure that if you took this position you would do as you have done—that is, carry it through with distinction and thoroughness. We as an Institute are proud to think that so distinguished an artist as yourself has been at the head of our affairs for the last two years, and we shall always look back upon it with the greatest pleasure. I am no longer in the fighting line, and therefore have not seen you on the Council or with your coat off, as Mr. Slater says you have been occasionally, and so I have nothing to say upon that side of your Presidential career. I am quite sure of this, however, that as you leave the Chair you leave an aroma here which will always be pleasant to those who remember the period of your office—an aroma of artistic enthusiasm which has never waned from the time that you commenced till now; an aroma of kindliness to young men, of sympathy with colleagues of your own time, and an aroma of good fellowship and kindliness to everyone with whom you have been brought into contact. I am quite sure you have made no enemies, but have made everyone your friend, and at the same time, as Mr. Slater says, have done your duty, as we all knew you would, as President of the Institute. I therefore second most heartily Mr. Slater's proposal that the best thanks of the Institute be given to you for your notable services during the last two years as President of the Royal Institute of British Architects. (Loud cheers.)

Mr. Henry T. Hare, *Hon. Secretary*, having put the motion to the Meeting, the vote of thanks was carried by acclamation.

The President: Ladies and gentlemen, I can hardly find words to express to you what I feel after the very kind things that my friends Mr. Slater and Sir Aston Webb have said about me and my stumbling through the Presidentship. (Laughter.) I approached the office with great misgiving, feeling that the thing was not in my line. It has, however, been a sincere pleasure to be associated with so many good men earnestly working for the common good and giving up their time in the interests of art and for the benefit of their fellows. I am much indebted to our very efficient staff, who have always kept things in good order for me; and very much to my friend, our able Secretary, Mr. MacAlister. (Cheers.) He has always been a staff to lean upon. I feel that the Institute is doing very earnest and useful work. I little realised when taking this office how manifold are the Institute's activities—how much quiet work there is to do, and how many important matters are referred to the judgment of the President. You will give me credit for doing my best according to my light in using that judgment, and I am sure that I have your forgiveness when the judgment has been at fault. I thank you most sincerely for the kindness you have shown me to-night and for allowing me for these two years to "boss the show." As Mr. Roosevelt says, it is very pleasant to do that, and to be decked with "a little brief authority." Now it is over, and a very good and strong friend follows me. Younger hands will take the reins, and I am sure that the vehicle will be well driven under Mr. Leonard Stokes' guidance. (Loud cheers.)

R.I.B.A. TOWN PLANNING CONFERENCE, 10TH–15TH OCTOBER 1910.

The Royal Patronage.

His Majesty the King has been graciously pleased to accord his Patronage to the Town Planning Conference.

Hon. Vice-Presidents of the Conference.

The following is a further list of acceptances of the position of Vice-President of the Conference:

The Right Hon. Lewis Harcourt, M.P.
Sir William Richmond, K.C.B., R.A.
Sir William Emerson.
Sir George Frampton, R.A.
John Belcher, Esq., R.A.
Thomas E. Collcutt, Esq.
G. M. Freeman, Esq., K.C.
G. N. Count Plunkett, Esq.

The first list appeared in the JOURNAL for 5th March.

The Conference Exhibition.

The Exhibition Committee would be glad if architects and others possessing *drawings or models* illustrating town planning design, which they would be willing to lend for exhibition, would send particulars thereof to the undersigned at as early a date as possible.

The space at the disposal of the Committee being limited, they are unable to accept illustrations of buildings other than such as have a definite connection with the subject of town planning.

JOHN W. SIMPSON,
Secretary-General of the Conference,
9 Conduit Street, Regent Street, W.

A Relic of William Burges.

At the General Meeting of the Institute last Monday the President drew members' attention to an old vellum-leaved sketch-book full of sketches by the late William Burges, and asked the Secretary to read the following letter from Sir William Emerson, whose gift it was to the Library:—

10th June 1910

DEAR MR. PRESIDENT,—Herewith I send you for formal presentation to the Royal Institute of British Architects the vellum sketch-book of Mr. William Burges, A.R.A., which I bought at the sale of his effects after his death.

I think the R.I.B.A. should be the owner of this book, which in its way is a very valuable memento of his methods of working and drawing.

Perhaps you will kindly present it for me on the evening of the presentation of the Gold Medal, as I find I shall be unable to attend that evening.—Believe me, yours sincerely, WM. EMERSON.

The sketch-book contains drawings of tombs, fonts, font-heads, fountains, shrines, organ-lofts, gargoyles, screens, bench-ends, altar-pieces, vases, and numerous other details which had taken the artist's fancy on his holiday excursions here and abroad. There are also some masterly sketches of human types, of various species of animals, and of monsters half beast and half man after the creations of the sculptors of mediæval times. Many of the sketches show the artist's well-known regard for the comic element and his appreciation of the grotesque. It is understood that at the sale referred to in the above letter there was some very keen bidding for the relic, and that it was finally knocked down to Sir William Emerson for £250.

On the motion of the President the Meeting passed a very hearty vote of thanks to Sir William for his valuable and interesting present.

The R.I.B.A. Board of Education.

The Board of Architectural Education provided for in By-law 48 has been appointed by the Council, and is constituted as follows:—The President, Messrs. Reginald Blomfield, A.R.A., John J. Burnet, LL.D., A.R.S.A., Walter Cave, Max Clarke, E. Guy Dawber, Wm. Flockhart, Edwin T. Hall, Henry T. Hare, George Hubbard, F.S.A., W. R. Lethaby, Ernest Newton, E. S. Prior, Halsey Ricardo, John W. Simpson, Lewis Solomon, John Slater, Sir A. Brumwell Thomas, Paul Waterhouse, Sir Aston Webb, C.B., R.A., Ian MacAlister, *Secretary of the Royal Institute,* Herbert G. Tayler, *Secretary to the Board.*

The Board has held its first meeting and elected its officers as follows:—Mr. Reginald Blomfield, *Chairman*; Mr. Ernest Newton, *Vice-Chairman*; Messrs. John W. Simpson and John Slater, *Hon. Secretaries.*

The province of the Board is to deal with the education of students in architecture and to conduct by examiners approved by the Council such examinations as are required by the Royal Institute under the provisions of any Act of Parliament or of the Charter and By-laws.

Monograph of the New Sorbonne.

The distinguished architect of the Sorbonne, M. Nénot, Membre de l'Institut, has just presented to the Library a copy of the magnificent folio *Monographie de la Nouvelle Sorbonne*, published at Paris by the Imprimerie Nationale in 1903. The volume was laid on the table at the General Meeting last Monday and attracted much interest. A detailed notice is in preparation for a future issue of the JOURNAL.

The Aldwych Site.

The *Times* of the 23rd inst. states that the French Palace Development Syndicate, which has entered into negotiations with the London County Council for the occupation of the Aldwych site of the Holborn to Strand improvement, will begin building operations in October. It is understood that, although tentative plans have been drawn up, the plans, elevations, and specifications of all the

buildings of what is known as the Palace of French Arts and Industries will be entirely subject to the Council's approval, which they have yet to receive. The total area to be occupied by the new undertaking is 124,000 square feet. The length of the Strand frontage is 430 feet, and that of the Aldwych frontage 450 feet. The average depth is 300 feet. The estimated cost of the buildings is about £800,000. The buildings will comprise a large hall, in which a permanent exhibition of French arts and industries will be held, including the products of the French colonies. This will also be used for international receptions, official banquets, conferences on French industries and arts, educational conferences, and similar purposes. In addition there will be a café restaurant, containing dining-rooms, a grill-room, and billiard-rooms. Winter gardens will be attached to the restaurant. A theatre, where French artists will appear in classical and modern plays, is also included in the scheme. There will be a private Royal entrance and a special box and ante-rooms for the accommodation of Royal parties. A feature of the enterprise will be the tea-rooms, which are designed to be a tea place for ladies who visit the palace to inspect the shops and exhibition. Surrounding this will be a terrace where people may sit and take their refreshment in the open air. A bandstand will be situated close by. Premises are to be provided for a French club for the members of the French colony in London and the United Kingdom. Over a hundred shops in which French goods will be displayed form part of the scheme. There will also be French banks and *bureaux de change*, safe deposits, inquiry bureaux, postal and telegraph offices, and messenger offices. The principal frontage of the building will be in Aldwych, facing Kingsway, so that upon entering Kingsway from the Holborn end the most prominent architectural feature will be the Aldwych elevation of the palace. In the tympanum of the porch facing Kingsway will be a bas-relief, executed by a French artist, representing the inauguration of the *entente cordiale*. King Edward VII. will be represented welcoming M. Loubet, and these two principal characters will be surrounded by their suites, including King George V. (then Prince of Wales), the Duke of Connaught, Lord Lansdowne, Mr. Balfour, M. Delcassé, and M. Paul Cambon.

New Slade Professor.

Mr. Selwyn Image has been elected to the Slade Professorship of Fine Art, in succession to Mr. C. J. Holmes, Director of the National Portrait Gallery.

Mr. Image was educated at Marlborough and New College, of which he was one of the first open exhibitioners. After leaving Oxford he took Holy Orders, and was for some years a curate at All Hallows, Tottenham, and afterwards at St. Anne's, Soho. During his undergraduate years (1868–1872) the Slade Chair was held by Mr. Ruskin, whose first tenure of office lasted from 1869 to 1879. *The Times* of the 20th, in announcing the election, states that Mr. Image was one of those who felt most strongly the impulse given by Ruskin to Oxford life and thought, and his studies under Ruskin have borne fruit in later life. His connexion with the Art Workers' Guild, of which he was elected Master in 1900, has, as is fitting in a follower of Ruskin and William Morris, been marked by a consistent attempt "to arouse and develop an appreciation of art as an important element in civilised human life," and his lectures to the Guild have been received with enthusiasm by a very critical audience. His chief works are Windows for the Prince of Wales's Pavilion at the Paris Exhibition, the West Window, St. Luke's, Camberwell, and the "Four Archangels" at Morthoe Church, Devon. Besides being a distinguished critic of more than one form of art, Mr. Image has published a volume of poetry, entitled "Carols and Poems." He has acted for the London County Council in making awards under their art and technological schemes, and he has given much help in connexion with Picture Loan Exhibitions.

The Slade Chair was founded in 1869 under the will of Mr. Felix Slade. Its successive occupants have been Mr. Ruskin, Sir William Richmond, K.C.B., R.A., Mr. Ruskin again, Sir Hubert von Herkomer, Mr. H. E. Wooldridge, and Mr. C. J. Holmes.

The Protection of Ancient Buildings.

The annual meeting of the Society for the Protection of Ancient Buildings was held last week at Burlington House, under the presidency of Lord Avebury. In their 33rd annual report the committee called attention to the increasing number of cases where the Society's advice had been given—over 200 buildings came before the Society during the year—and to the importance of securing early information of schemes of "restoration" and enlargement.

The Chairman, in moving the adoption of the report, said that all forgeries were bad, and what they really wanted in restoration was simply to restore and not in any way to deceive the antiquaries of the future. They were greatly indebted to those members who, without pecuniary remuneration, devoted their time, energy, and skill to visiting different places and making the interesting reports on which the excellent work of the Society was based.

The motion was seconded by Mr. Somers Clarke and adopted.

Prince Frederick Duleep Singh afterwards read a paper on "Some Norfolk Manor Houses." He said that with rare exceptions the old mansions of Norfolk had suffered irremediably at the hands of the restorer, though happily some of the smaller houses had escaped. In addition to the use of brick, the other characteristics of what might almost be said to constitute the Norfolk style were

the crow-stepped gable, double dormer windows, very ornate chimneys, pediments of stone or of cement-covered moulded bricks to windows and doors; and the use of terra cotta. The lecturer, in the course of his detailed description of one of several beautiful photographs thrown upon a screen, said that the late King had a great reverence for old buildings. On a visit shortly after he became a Norfolk squire to one of these old houses his host rather apologised for being obliged to receive the Prince of Wales, as he then was, in so small and old-fashioned a hall, and added that he hoped on a future occasion to have put something more worthy in its place. "What! destroy this old house?" replied the Prince, "you must not do that; it is history." And so it had stood to this day.

Royal Birthday Honours.

Among the recipients of the honours conferred by the King on the occasion of the day set apart for the celebration of his late Majesty's birthday are the following members of the Institute, who have received Knighthoods: Mr. Alfred East, A.R.A. [*H.A.*], President of the Royal Society of British Artists, and Mr. Alexander Rose Stenning [*F.*], retiring President of the Surveyors' Institution.

The University of Glasgow has conferred upon Mr. J. J. Burnet, A.R.S.A. [*F.*], the honorary degree of LL.D.

Palestine Exploration Fund.

The forty-fifth annual general meeting of the Palestine Exploration Fund was held at the Royal Institution, Albemarle Street, on Monday, 13th June, when the Very Rev. George Adam Smith, Principal of the University of Aberdeen, occupied the chair.

Sir Charles Watson, the President of the Executive Committee, gave an account of the excavations at Gezer and some details as to the new excavations about to be entered on at Ain-es-Shems. Professor Macalister, after investigating a number of sites, had come to the conclusion that Ain-es-Shems was the one that offered the most probable results from the exploration point of view. Ain-es-Shems was stated to be the Beth-Shemesh of the Bible, where the "Ark of the Lord" drawn by "two milch-kine on which there hath been no yoke" stopped on its return to the Israelites by the Philistines. An Irade had been issued for the purpose; the Young Turks pushed things on a good deal quicker than the old Turks used to do. The Committee of the Fund had secured the services of Dr. Duncan Mackenzie, who had been for many years employed under Dr. Evans at Knossos, in Crete, to replace Professor Macalister, who had been appointed a Professor in the University of Ireland. The Society would be confronted this year by the cost of the publication of the *Memoir of the Excavations at Gezer*, as well as the inevitable heavy outlay in the excavation of a new site, and would therefore need the hearty financial support of the public.

The Chairman said that a critical period had arrived in the history of the Fund; the work at Gezer could not be considered final until they had received the memoir which Professor Macalister was preparing. The expense of publishing the work was enormous, and unless they obtained further support they would not be able to do justice to the splendid work which Professor Macalister had undertaken.

REVIEWS.

BUILDING CONTRACTS.

Supplement to the Third Edition of Hudson on Building Contracts. La. 8o. Lond. 1910. Price 3s. 6d. net. [Sweet & Maxwell, Lim., 3 Chancery Lane.]

The Supplement to the third edition of the author's well-known work on Building Contracts comprises matter of considerable importance to all concerned in practice relating to building and building contracts. It records the judgments in the following cases, viz.: (1) *Patman and Fotheringham* v. *Pilditch* (in the King's Bench Division); (2) *Kennedy* v. *Barrow-in-Furness Corporation*, and (3) *Blackwell & Co.* v. *Derby Corporation* (the two latter in the Court of Appeal), with notes setting forth in brief the effects of those judgments respectively. It also records the decision of the House of Lords in the case of *Pearson v. Dublin Corporation*.

The case of *Patman and Fotheringham* v. *Pilditch* relates to the admission of bills of quantities as part of a building contract. The Courts have always shown extreme reluctance to admit quantities as part of a lump sum contract, on the principle that such admission would be inconsistent by converting a contract for a lump sum into a contract for an indefinite amount to be ascertained by measure and value, and the author in his work on Contracts (Vol. I., 3rd edition, p. 150) states upon this subject:—

"If the contract is to complete an entire work for a certain sum, and is not otherwise divisible, the fact of making the quantities, or the builder's detailed estimate, a part of the contract, will not make it a contract to do the work and labour detailed in the quantities or estimate only and no more."

The judgment in the case now quoted is in the nature of a departure from previous decisions, and it should be carefully studied and compared with those previously recorded and referred to in the author's earlier work. It is important, however, to note that this case was not carried to appeal, and that it was afterwards "settled."

The cases of *Kennedy* v. *Barrow-in-Furness Corporation* and *Blackwell & Co.* v. *Derby Corporation* bear upon important questions relating to arbitration. The judgment in the first named points the distinction between the administrative and judicial power of the architect, or engineer, and the necessity of clear definition of the precise intention with regard to reference to arbitration in an agreement of contract.

The case of *Blackwell & Co.* v. *Derby Corporation* deals with the delicate question of disqualification of an arbitrator. In previous cases the Courts have

found that it is difficult to draw the line as to disqualification short of dishonesty, but this case admits other circumstances as involving disqualification.

The decision of the House of Lords in the case of *Pearson* v. *Dublin Corporation* (the judgment in the Court of Appeal is reported in the 3rd edition of Hudson on Building Contracts) decides as to the responsibility of employers for fraudulent misrepresentation on the part of their engineer. The case has had a long and chequered career. The action was tried first in the King's Bench Division (Ireland) before Chief Baron Palles, and the judgment of that Court was appealed against before a Divisional Court, and the appeal was allowed. That decision was carried to the Court of Appeal (Ireland), when the original judgment was restored, but has now been again reversed by the House of Lords.

Mr. Hudson has rendered good service by bringing these cases clearly to notice, not only recording the effects of the decision, but setting forth the judgments at length, except in the case of *Pearson* v. *Dublin Corporation* in the House of Lords, in respect to which after reading the judgments therein delivered by the Court of King's Bench (Ireland) and the Court of Appeal (Ireland), the reader is left wondering what could have been the grounds on which they were reversed by the Lords.

The judgments reported are worthy of careful study, and they are interesting moreover as indicating the views which lawyers and judges take of certain matters, as compared with the traditional views prevailing amongst architects, and others familiar with such matters, in ordinary practical routine. They also point the moral of the importance of a definite decision and clear expression of the intention of the parties to a contract in view of possible subsequent legal proceedings. It must be added, however, that perusal of the various judgments herein referred to induces one to the opinion that the best advice to one about to go to law would be that offered by *Punch* to those about to marry—"Don't."

WM. H. ATKIN-BERRY [*F.*].

CORRESPONDENCE.

CHARLES II. TRIUMPHAL ARCHES.

94 *High Holborn, W.C.: London, 17th June* 1910.

To the Editor JOURNAL R.I.B.A.,—

DEAR SIR,—In connection with Mr. Walter Millard's inquiry as to the authorship of the drawings of the triumphal arches in the Institute Collection, it is interesting to note that they were engraved by David Loggan, who both drew and engraved the plates for the two volumes *Oxonia Illustrata* and *Cantabrigia Illustrata* (published in 1675 and 1688 respectively). On two of the engravings of the arches are the words "D. Loggan sculpt.," and in one case the word "fecit" and no other name appears. What does the word "fecit" include? One of the plates of the arches in the Crace Collection in the British Museum has "E. J. inv." in the centre, but it is very difficult to say whether this has been added in ink, or appears upon some "states" of the engraved plate: presumably the former has happened because these words do not appear upon the plate in the Crowle Pennant Collection (also in the British Museum), or in two copies I have seen of Ogilby's *The Entertainement of his most Excellent Majestie Charles II. in his passage through the city of London to his Coronation, &c.*, published in 1662. It seems to me that the initials "E. J." are meant to be those of Edward Jerman, who built the late Royal Exchange about 1669, and so whoever added them thought Jerman was entitled to the credit of having been the designer.—Yours faithfully,

HERBERT BATSFORD.

ALLIED SOCIETIES.

Manchester Society of Architects.—On Saturday, 11th June, nearly thirty members of the Manchester Society of Architects visited Peover Hall, near Knutsford, Cheshire, under the leadership of Mr. Isaac Taylor. By the courtesy of Sir H. S. Mainwaring, Bart., arrangements had been made for the members to be conducted through the Hall and adjoining buildings. The main portion of the Hall, a red brick building of Georgian date, is hardly an inspired piece of work, although it has a very simple and effectively treated staircase. The large Elizabethan wing, however, containing a huge kitchen and five upper rooms, is of the most delightful charm; the lovely colour of the old brickwork and stone, the fine stone mullioned and transomed windows, the grouping of the chimneys and sharply pointed gables, all contribute to an effect of the utmost beauty. It was this portion of the group of buildings that figured most prominently in members' sketch-books. The stables are extremely interesting, especially the earlier block containing Jacobean stalls sumptuously adorned with oak columns and the characteristic strapwork of the period. The adjacent church contains in the side chapels some fine tombs of the Mainwarings. On the Tuesday evening following, a large number of members visited Middleton, and inspected two elementary schools, by Messrs. Edgar Wood & Sellers, under the guidance of Mr. Sellers. While it is quite the usual thing nowadays to find elementary schools planned with every requirement and convenience, duly supplied with good lighting and proper aspect, it is rarely that one finds these qualities combined with so serious an attempt at fine architectural expression as in the case of the Elm Street and Durnford Street schools. At Elm Street the treatment of the entrance court, with groined cloisters at the sides and a semicircular sweep of low buildings in front of the central hall, and the striking treatment of the interior of the central hall and its fenestration, are the outstanding features of a remarkable design, while at Durnford Street, where the plan is on more usual lines, the building towers up in great masses, the dignity of which is immensely enhanced by the severity and restraint of the design.

LEGAL.

Fire Protection in a London Hotel.

An appeal, under section 22 (1) (*a*) of the London Building Act (Amendment) Act, 1905, by Mrs. Mary Clark, against the refusal by the London County Council to issue a certificate pursuant to the section of the said Act relating to "protection against fire in certain new buildings," in respect of the building known as the Berners Hotel, Berners Street, W., came before the Tribunal of Appeal on 1st June at the Surveyors' Institution. The following is extracted from *The Times* reports of the 1st, 10th, and 24th June.

As the appellant was a client of Mr. John Slater, a member of the Tribunal, the latter had been temporarily reconstituted as follows: Mr. Felix Cassel, K.C. (president), appointed by the Secretary of State; Mr. John W. Simpson, appointed by the Council of the Royal Institute of British Architects; and Mr. Alexander R. Stenning, Past President of the Surveyors' Institution, appointed by the Council of that body.

Mr. Bodkin (instructed by Messrs. Bennett and Ferris) appeared for the appellant; and Mr. Cecil Walsh (instructed by Mr. Chilvers, of the Solicitors' Department of the London County Council) for the respondents.

Mr. Bodkin submitted that the building had been constructed with the most scrupulous care to provide proper means of exit, and that, having regard to the size and character of the building, to put up screens in the corridors, as required by the County Council, would not only defeat the object of that body, but would be a serious inconvenience in the management of the hotel. The guests and servants would have to go through swing doors every time in getting to the lifts and staircases. Moreover, the presence of such doors might facilitate robberies, as the doors could easily be wedged by criminals. The appellant therefore asked that the stipulations as to screens should be reviewed.

Mr. Frederick Izant, chief surveyor to the Phœnix Assurance Company (Limited), said that he had specialised in the study of buildings with a view to fire and smoke prevention. The Berners Hotel was constructed of incombustible materials, and the corridors and staircases were entirely free from draperies of every kind. The passages were exceptionally roomy and well ventilated. In the unlikely event of a fire occurring there was no fear of smoke entering the staircases, as any outbreak would be practically stamped out at once.

Mr. John Slater, the architect of the hotel, said that in his opinion there was no reasonable risk of smoke or fire, and he did not think there was a safer building in London.

The appeal was further heard on 9th June, and was concluded on the 23rd, when Mr. Slater formally produced the plans.

Mr. Walsh submitted that the Tribunal had no jurisdiction to receive new plans for the purpose of being approved which had never been before the County Council and which had not been lodged at the time of the notice of appeal. If the present procedure was allowed it would not be necessary in future to submit any plans at all. The mere fact that the appellant had deposited other plans some time ago had nothing to do with the question.

Mr. Bodkin: They were there not to approve plans in the ordinary sense, but to approve plans showing the means of escape, and the Tribunal was simply asked to say that proper means of escape had been provided.

The members of the Tribunal having consulted in private, the Chairman stated that they had come to the conclusion that in the circumstances of this case the screens in question were not reasonable requirements. Their decision related to this particular building, and must not be taken as a precedent. The form of their order would be that they approved certain plans Mr. Slater had put in, and that they determined that the building had been provided with means of escape in accordance with these plans. There would be no order as to costs.

MINUTES. XVI.

Special General Meeting (A. U. C. Shares).

At a Special General Meeting summoned by the Council in accordance with the provisions of Clause 22 of the Charter and By-law 67, and held Monday, 20th June 1910 at 8.25 P.M.—Present: Mr. Ernest George, A.R.A., *President*, in the Chair; 37 Fellows (including 13 members of the Council) and 25 Associates (including 2 members of the Council)—the Minutes of the Special General Meeting held Monday, 9th June, having been already published in the JOURNAL, were taken as read and signed as correct.

The resolution of which notice had been given having been read by the Secretary was put from the Chair, and voted upon by show of hands; whereupon it was

RESOLVED, unanimously, "That this Meeting, summoned in accordance with Clause 22 of the Charter, hereby confirms the Resolutions passed at the Special General Meeting of the 9th June—viz.

"(1) That the Council be empowered to purchase all the shares in the Architectural Union Company not now in the possession of the Royal Institute.

"(2) That the Council be empowered to pay to Mr. Edward Freeman the sum of £1,250 in compensation for the eventual loss of his office as Secretary of the Architectural Union Company."

The Special Meeting then terminated.

Ordinary General Meeting (Royal Gold Medal).

At the Sixteenth General Meeting of the Session 1909–10, held Monday, 20th June 1910, following the above Special General Meeting—Present: Mr. Ernest George, A.R.A., *President*, in the Chair; 37 Fellows (including 13 members of the Council), 25 Associates (including 2 members of the Council), 1 Hon. Fellow, 5 Hon. Associates, 3 Licentiates, and several Visitors—the Minutes of the Business General Meeting held Monday, 6th June 1910, having been already published were taken as read and signed as correct.

The Hon. Secretary announced the decease of Matthew Henry Holding, *Associate*, elected 1881.

The decease was also announced of Thomas Jerram Bailey, elected *Associate* 1881, *Fellow* 1893, late architect to the Education Authorities of London. On the motion of the Hon. Secretary the Meeting resolved that the regrets of the Institute be entered on the Minutes of the Meeting and that a vote of sympathy and condolence be passed to the widow and family of the lamented Fellow.

The following attending for the first time since their election were formally admitted by the President—viz. Wm. Milburn, jun., *Associate*, and John Charles Bourne, William Herbert Webb, and Sydney Joseph Tatchell, *Licentiates*.

The Secretary read a letter addressed to the President from Sir William Emerson, *Past President*, presenting to the Institute a book of original sketches by the late William Burges: whereupon, on the motion of the President, the thanks of the Meeting were accorded to Sir William by acclamation.

The President delivered an Address on the Presentation of the Royal Gold Medal, the gift of his late Majesty King Edward VII., to Mr. Thomas Graham Jackson, R.A., LL.D., and Mr. Jackson having been duly invested with the medal replied in acknowledgment of the honour.

On the motion of Mr. John Slater [*F.*], seconded by Sir Aston Webb, C.B., R.A., *Past President*, a vote of thanks was passed by acclamation to Mr. Ernest George, A.R.A., the outgoing President, for his conduct of the affairs of the Institute during his occupancy of the Presidential Chair.

The President having briefly responded, the proceedings closed and the Meeting terminated at 9.15 P.M.



Versailles: The Basin of Apollyon and the "Tapis vert."

HOUSE AND GARDEN: AN ESSAY ON THE TREATMENT OF GARDENS IN CONNECTION WITH BUILDINGS.*

By J. A. O. Allan, *Godwin Bursar* 1909, *R.I.B.A. Essay Medallist* 1910.

"With orchard, and with gardeyne, or with mede,
Se that thyne hous with hem be umviroune;
The side in longe upon the south thou sprede,
The cornel ryse upon the wynter sonne,
And gire it from the cold west yf thou conne."—Palladius on *Husbondrie*.

PROLOGUE.

MAN had a garden before he had a house, and he had doubtless gained considerable proficiency in horticulture before he knew much of the science of building or the art of architecture. Early man probably cared more for his garden than for his house, more for the soil which produced his food than for the roof that protected him from sun and storm. With the passing of the ages, however, changes have come, and an existence dragged out in the crowded cities of to-day has crushed the garden out of the work and the thoughts, and almost out of the memory, of thousands. The love of outdoor life is planted deep in man's breast, but the city life has almost smothered it.

In the meantime the constructive arts have flourished. Without buildings, without architecture, the city could not exist. Building has spread over the cities, but the gentle art of gardening, for lack of opportunity, has lagged behind. Even in Bacon's day this was the case, for he wrote of gardening that "a Man shall ever see, that when Ages grow to Civility and Elegancy, Men come to build stately, sooner than to garden finely; as if Gardening were the Greater Perfection."

Not that the science of horticulture has not advanced. On the contrary, it stands where it never stood before, and is still advancing. There is no lack of skill in all that belongs to the technics of the garden, viewed simply as a sphere of plant life. But where stands the art of the garden? What advance has been made since "the spacious times of great Elizabeth"

* Submitted under motto "Domus et Hortus," and awarded the Royal Institute Silver Medal and Twenty-five Guineas, 1910.

in the ability " to garden finely " ? Undoubtedly the art of the garden has not kept pace with the art of the house. Sir Walter Scott wrote, " Nothing is more completely the child of Art than a garden." The art of the garden is not simply a taste for plants and a love of flowers, but an application and extension of the principles of art generally, and especially those of architecture, to the garden as the complement and consummation of the " mistress art." It is an appreciation of the beauty of line and form, of light and shade, of the harmonies and contrasts of colour.

In view of the movement of to-day towards " garden-cities," it is incumbent on the architect to reclaim for his art the right to determine not only all that concerns the building itself, but its immediate environment—that is, in the broad sense, not the technical details of planting, but the general design, the composition, the plan, so that building and garden shall be welded into one harmonious, well-proportioned, artistic unity. As Vinet says,

> A garden is a place arranged for promenades, and at the same time for the recreation of the eyes. But it is also an accessory to the house, serving it as an accompaniment, an environment, and within certain limits it is simply another apartment, an annex of the house. Therefore, how can the art which built and adorned the dwelling be refused the right to interfere in this exterior house ?

The architect allowed the design of the garden to slip out of his hands in the eighteenth century, and since then it has wandered in the wilderness, devoid of sound principles, and to a great extent in the hands of men who have laid out the environment of buildings as seemed right in their own eyes, and without the slightest regard to the architecture which their work was supposed to embellish.

In the following pages the history of the garden in connection with buildings is briefly sketched, and the principles of garden design set forth in their application to the various features of the modern garden.

OF GARDEN-MAKING IN THE PAST.

The history of garden-making runs back to the dawn of man's history. Bacon, in his essay " On Gardens," commences, " God Almighty first planted a Garden." The Book of Genesis sketches the features of the first garden in broad outlines only. We learn, however, that it was planted for man's use, designedly and not by chance, and we gather that it was an enclosed area. We are told that it was watered by a river, and that the vegetation included not only what was " good for food," but also what was " pleasant to the sight." It was intended for man's home, and it also provided him with an occupation, for he was " to dress it and to keep it." The garden was thus to be an object of man's care and solicitude, providing for him both food and pleasure which he could not find in the wilder country outside its bounds.

Milton's description of the garden in *Paradise Lost* is, as might be expected, to some extent based on the English gardens of his own time, but his views were claimed as favouring those of the naturalesque school of a rather later day. In his Essay on Gardening, Horace Walpole wrote, " The description of Eden is a warmer and more just picture of the present style than Claud Lorraine could have painted from Hagley or Stourhead."

In the history of the Jews are found many evidences of their love for gardens and flowers. Ancient Hebrew poetry is full of references to the rose and the lily, and occasional mention is made of such flowers as the saffron and the cinnamon, the camphire and the spikenard. Apart from the houses of the wealthy, the gardens were enclosures outside the cities. They were surrounded with the thorny cactus, which made an impenetrable hedge, but in some districts they were enclosed with stone walls. There were vineyards, orchards of fig, olive, citron, and pomegranate trees, vegetable gardens and gardens of aromatic plants. To protect these enclosures from thieves and wild animals, watch-towers were erected for the accommodation of

keepers when the fruit was approaching maturity. Each garden had its well lined with masonry, and a raised tank, filled by means of a sâkiyeh.

Solomon wrote, "I made great works: I builded me houses: I planted me vineyards: I made gardens and orchards, and I planted trees in them of all kind of fruits: I made me pools of water, to water therewith the wood that bringeth forth trees." The royal gardens were watered by means of large pools, the remains of which are still to be seen. They were, however, works of engineering, necessitated by the long droughts, rather than provisions for ornament. The Romans, when they acquired dominance over Palestine, found it a fertile and highly cultivated country, the sides of many of the hills being covered with terraced vineyards and gardens.

Egypt.—The gardens of Egypt are among the most ancient on record. They were irrigated by canals connected with the Nile. Many of them covered a large area and included vineyards and date and pomegranate orchards, also vegetable and flower gardens. The flower-beds were rectangular in shape, but sunk slightly below the level of the surrounding ground to permit of their irrigation. The ancient Egyptians were passionately fond of flowers. They decorated the interiors of their houses lavishly with them, in the shape of wreaths and festoons. On festive occasions guests were not only presented with a lotus or some such flower, but were crowned with chaplets, explaining the Roman poet's reference to the "many chaplets on the foreheads" of the Egyptians at their banquets.

In Rosillini's *Monuments of Egypt and Nubia* there is an interesting reproduction of a drawing of a garden discovered in a tomb at Thebes. This garden is on strictly formal lines, being square and surrounded by an embattled wall, outside of which runs an avenue of trees, at regular intervals, along the river or canal side. A lofty gateway stands at the centre of the river front, decorated with hieroglyphic inscriptions. A large vineyard occupies the central area of the garden, and beyond it, in line with the entrance, stands the house. There are four rectangular pools, symmetrically disposed, in which the lotus and other aquatic plants are shown and in which water-fowl are disporting themselves. The pools are surrounded by plots of grass, and at the sides and ends are vases or pots containing papyrus plants. The trees indicated, evidently palms and sycamores, are all planted in regular rows, and from this and similar drawings it would appear that pleaching is no new thing. Two kiosks or arbours are shown, one on each side, looking on to the pools in each case. The vines are shown growing on trellis work. The walks are all in straight lines, arranged with perfect symmetry. Some 3,400 years have passed since the archaic representation of this old garden was painted on the tomb of a great military chief who lived during the eighteenth dynasty.

Greece.—We have but little reliable information of Greek gardens. Homer describes in the *Odyssey* the gardens of the palace of Alcinöus. They were of considerable size, covering four acres, and surrounded by a hedge. Within the garden the poet places "tall trees blossoming, pear trees and pomegranates, and apple trees with bright fruit, and sweet figs, and olives in their bloom." The garden also included a vineyard, "a sunny plot on level ground." Flowers were also grown, for the account goes on to say that "skirting the furthest line are all manner of garden beds, planted trimly, that are perpetually fresh, and therein are two fountains of water, whereof one scatters his streams all about the garden and the other runs over against it beneath the threshold of the courtyard, and issues by the lofty house, and thence did the townsfolk draw water."

It appears that at least some of the Grecian temples were surrounded by gardens. Pausanius writes of a grove being attached to the temple of Diana, where different fruit trees were grown. The same writer also describes the grove of the temple of Æsculapius at Athens as being "most beautifully planted with trees," and speaks of it as being "no less delectable for the sweet smell which it exhales than for the pleasant spectacle which it affords." Less is known of their

flower-gardens, but violets, roses, narcissi, iris, and other flowers were cultivated for festal and decorative purposes.

Gardens were the classrooms of such philosophers as Plato, Socrates, and Epicurus. The will of Theophrastus left his house and his garden, of which he specially mentions the walk, to certain of his friends, " to devote themselves to study and philosophy therein."

The pillars originally used by the Greeks to mark the limits of grounds were latterly decorated with sculptured heads of Hermes, the tutelary god of highways and boundaries, and thus probably statuary made its first appearance in the garden.

The Roman Empire.—Passing on to the Romans we have ample testimony to their love of gardens. The number and extent of the gardens, both public and private, in Rome were such as to entitle it to be called a " garden city." We find the genius of the nation stamped on its garden-art, for it was designed on clearly defined principles, on straight and symmetrical lines, and yet full of classic grace. It had a strong architectural character, and was clearly designed to make the house and garden a complete whole. The hilly character of the country led the Romans to adopt terrace gardens, and ultimately they became so fond of this treatment that sites were preferred which gave the desired effect. This necessitated the erection of terrace walls and steps, and gave opportunities for the exercise of the arts of architecture and sculpture, in a most picturesque manner. In this they were followed by the Italians of the Renaissance, and Landor remarks, " We English talk of planting a garden ; the modern Italians and the ancient Romans talk of building one," and he quotes a letter of Cicero, " *Cui Cneus noster locum ubi hortos aedificaret daret.*"

The love of gardens was universal, from the rich patrician, with his three or four villas in the country, to the poor citizen, to whose window gardens Pliny refers. Town houses were generally planned round one or two courtyards, according to their size, and these were almost invariably laid out as small formal gardens, with a pool and fountain in the centre, and shrubs and flowers. Such gardens have been found in Pompeii and Herculaneum. Some of these are so similar to the gardens being made during the English Renaissance that Horace Walpole wrote that " nothing is wanting but a parterre to make a garden in the reign of Trajan serve for the description of one in the reign of King William III." The gardens of the Romans mark an important stage in the history of garden design, for, through the Italian Renaissance, they have influenced, more or less, all that have followed.

The battle of the styles, the contest between the so-called " formal " and " natural " treatments, commenced in Imperial Italy, Quintilian, Pliny, and Varro being with the great majority in practising the former style, while the latter had for advocates such as Lucullus and Martial, and Nero had the gardens of his palace in the Apennines laid out after the style of the " paradises " of the Persians.

The custom of clipping the trees and shrubs near the house into formal shapes, known by the Romans as the " *ars topiaria,*" was greatly in vogue. The *topiarius* was the chief gardener, and there seems to have been no limit to his ingenuity in moulding the box, the ilex, and similar trees into all manner of fantastic forms.

The art of the sculptor was called in freely for the adornment of the gardens of the wealthy, and the luxury of the people was exhibited in their gardens as well as in their life otherwise.

The Romans were the first to build hot-houses for tender plants, and for the cultivation of fruits out of season, the windows being made of thin plates of talc.

Perhaps the best conception of the treatment of gardens in connection with the house, under the Romans, may be conveyed by a letter from Pliny the Younger to Apollinaris, in which he describes his villa in Tuscany, a summer resort, known as the Tusculan, some 150 miles from Rome. He writes :—

My villa is so advantageously situated that it commands a full view of all the country round. . . . Behind, but at a great distance, stand the Apennine Mountains. In the calmest days we are refreshed by the winds that blow from thence. . . . The exposition of the principal front of the house is full south, and seems to invite the afternoon sun in summer (but somewhat earlier in winter) into a spacious and well proportioned portico, consisting of several members, particularly a porch built in the ancient manner. In the front of the portico, is a sort of terrace, embellished with various figures and bounded with a box-hedge, from whence you descend by an easy slope, adorned with the representation of divers animals in box, answering alternately to each other, into a lawn overspread with the soft—I had almost said the liquid—Acanthus: this is surrounded by a walk enclosed with tonsile evergreens, shaped into a variety of forms. Beyond it is the Gestatio (place for driving exercises) laid out in the form of a circus, ornamented in the middle with box cut in numberless different figures, together with a plantation of shrubs, prevented by the shears from shooting up too high; the whole is fenced in by a wall covered with box, rising by different ranges to the top. On the outside of the wall lies a meadow that owes as many beauties to Nature, as all I have been describing within does to art; at the end of which are several other meadows and fields interspersed with thickets.

Opposite almost to the centre of the portico stands a square edifice, which encompasses a small area, shaded by four plane-trees, in the midst of which a fountain rises, from whence the water, running over the edges of a marble basin, gently refreshes the surrounding plane-trees and the verdure underneath them. . . . In the front of these agreeable buildings lies a very spacious hippodrome, entirely open in the middle, by which means the eye, upon your first entrance, takes in its whole extent at one glance. It is encompassed on every side with plane-trees covered with ivy, so that while their heads flourish with their own foliage, their bodies enjoy a borrowed verdure, and thus the ivy twining round the trunk and branches, spreads from tree to tree and connects them together.

Between each plane-tree are planted box-trees, and behind these, bay-trees which blend their shade with that of the planes. This plantation, forming a straight boundary on both sides of the hippodrome, bends at the further end into a semi-circle, which being set round and sheltered with cypress-trees, varies the prospect and casts a deeper gloom; while the inward circular walks (for there are several) enjoying an open exposure, are perfumed with roses, and connect, by a very pleasing contrast, the coolness of the shade with the warmth of the sun. Having passed through these several winding alleys, you enter a straight walk, which breaks out into a variety of others, divided by box-hedges. In one place you have a little meadow, in another the box is cut into a thousand different forms; sometimes into letters expressing the name of the master; sometimes that of the artificer; whilst here and there little obelisks rise, intermixed alternately with fruit trees; when, on a sudden, you are surprised with an imitation of the negligent beauties of rural nature; in the centre of which lies a spot surrounded with a knot of dwarf plane-trees.

Beyond these is a walk planted with the smooth and twining Acanthus, where the trees are also cut into a variety of names and shapes. At the upper end is an alcove of white marble, shaded by vines, supported by four Carystian pillars. From this bench, the water gushing through several little pipes, as if it were pressed out by the weight of the persons who repose themselves upon it, falls into a stone cistern underneath, from whence it is received into a fine polished marble basin, so artfully contrived that it is always full without ever overflowing.

When I sup here, this basin serves for a table, the larger sort of dishes being placed round the margin, while the smaller ones swim about in the form of little vessels and water-fowl. Corresponding to this is a fountain which is incessantly emptying and filling; for the water which it throws up to a great height, falling back into it, is by means of two openings returned as fast as it is received. Fronting the alcove (reflecting as great an ornament to it, as it borrows from it) stands a summer-house of exquisite marble, the doors whereof project and open into a green enclosure; as from its upper and lower windows the eye is presented with a variety of different verdures. Next to this is a little private recess (which though it seems distinct, may be laid into the same room) furnished with a couch; and notwithstanding it has windows on every side, yet it enjoys a very agreeable gloominess, by means of a spreading vine which climbs to the top and entirely overshades it. Here you may recline and fancy yourself in a wood; with this difference only—that you are not exposed to the weather. In this place a fountain also rises and instantly disappears; in different quarters are disposed marble seats, which serve, no less than the summer house, as so many reliefs after one is wearied with walking. Near each seat is a little fountain; and throughout the whole hippodrome, several small rills run murmuring along, wheresoever the hand of art thought proper to conduct them, watering here and there different spots of verdure, and in their progress, refreshing the whole.

The younger Pliny had another villa at Laurentum, on the Bay of Ostia, on the Tiber, near Paterno. It was more of a suburban residence, being only about fifteen miles from Rome. Here also a Gestatio ran round the gardens, bordered with box or rosemary. Along the inner circle of the Gestatio was a shady walk of vines. The garden had many fig and mulberry trees, and there

was a kitchen garden behind. From the house there extended an enclosed portico, with a range of windows overlooking the sea on one side and the garden on the other. "Before the enclosed portico," wrote Pliny,

is a terrace fragrant with sweet-scented violets, and warmed by the reflection of the sun from the portico, which, while it retains its rays, keeps away the north-east wind; and it is as warm on this side as it is cool on the side opposite; in the same way it is a protection from the wind on the south-west. . . . At the upper end of the terrace and portico stands a detached garden building, which I call my favourite: my favourite, indeed, as I put it up



FIG. 1.—VILLA ALBANI, ROME: MARBLE PORTICO: ENTRANCE TO THE BOSCO.
Reproduced by permission from Mr. H. Inigo Triggs' *Art of Garden Design in Italy* (Longmans, 1906).

myself. It contains a very warm winter room, one side of which looks down the terrace while the other has a view of the sea, and both lie exposed to the sun.

These are cited as samples of Roman gardens on a moderate scale. There were many others, larger and more elaborate, such as the gardens of Varro's villa at Casinum, and the gardens of Lucullus, the Roman general, which, laid out with regal magnificence, rose in terraces from the Bay of Naples.

Italy.—On the fall of the Roman Empire the art of the garden, with all the greater arts, languished in Italy until the advent of the Quattrocento, which ushered in the Renaissance of classic learning. The arts flourished in Rome, Florence, Venice, and many another Italian city,

culminating in the golden days of the Cinquecento, until they lost their vigour amid the faded flowers of the Baroque.

The characteristic features of Italian gardens were: the choice of a sloping site, broken up into terraces, which were emphasised in the design by retaining walls, balustrades, and stairways; the use of water in fountains, streams, and pools; the architectural and symmetrical treatment of all the parts of the garden, with formal avenues and hedges, and vistas closed with decorative features; the free use of sculpture against the deep green background of clipped box or ilex trees;

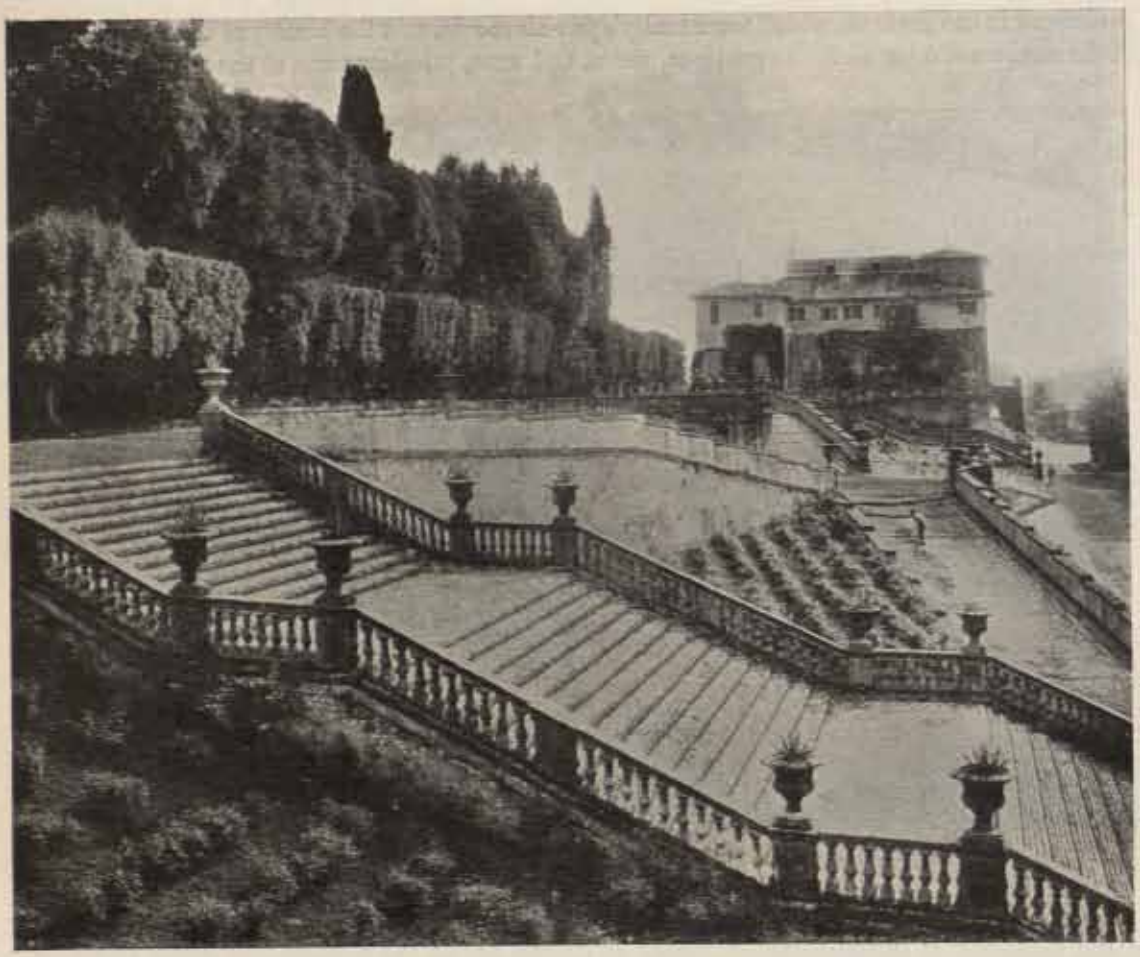


FIG. 2.—VILLA TORTONIA, FRASCATI: STAIRWAYS LEADING TO THE BOSCO.

Reproduced by permission from Mr. H. Inigo Triggs' *Art of Garden Design in Italy* (Longmans, 1906).

formally planned beds of flowers, and the broad treatment of such shady trees as the cypress, the stone pine, and the poplar. The gardens were often long and comparatively narrow, the axis lying up the hill and the house or *casino* generally standing half way up the slope.

The Italian gardens of the Renaissance are, by general consent, the most beautiful in the world. All that wealth, genius, and skill could lavish on the dwelling was found in the villas of the wealthy nobles and cardinals. For the realisation of their building schemes they could call for such architects as Bramante, Michelangelo, Peruzzi, Giulio Romano, Vignola, and Michelozzi. House and garden were equally the work of the architect, resulting in one complete and harmonious composition, the house being the climax of the garden, and the garden the decorative

setting in which the house was placed by a master's hand, a jewel of white gleaming marble. Although the word "villa," as transplanted into our tongue, speaks to us of the house only, it was not so in its native land. The word included not only the house, which was known as the *casino*, but also the *giardino*. House and garden alike were a reflex of the country, the climate, and the habits of the people. The hilly ground created their terraced gardens; the climate forbade the wide lawns of more humid lands; its blue sky and burning sun called for shade, for the sight and sound, the sparkle and splash of water tossed in the summer breeze, or still in some deep pool, reflecting the azure of heaven on its bosom. The outdoor life of the people was evidenced in the gardens, which were really open-air rooms, and the luxury of the day was shown in the exuberant ornament, the grottoes, vases, and urns, priceless gems of the sculptor's art, and

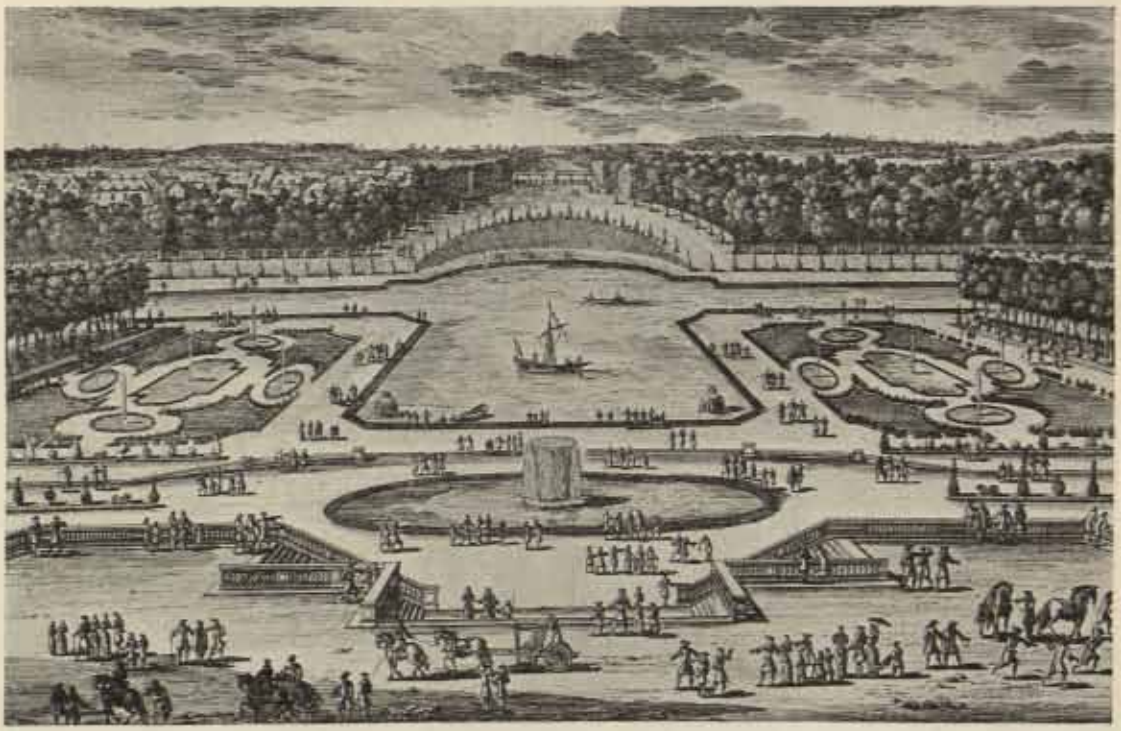


FIG. 3.—CHANTILLY, LATE SEVENTEENTH CENTURY: GRAND PARTERRE DE L'EAU AND CANAL.
From *Vues des Belles Maisons de France* (Langlois).

in the profusion of statuary, which seems to stream out of the palaces—divinities and satyrs, nymphs and *amorini*, promenading the terraces, trooping down the stairs and bathing in the cascades.

No description could give any adequate conception of the old-world beauty of such gardens as those that enshrine the Villa d'Este at Tivoli, laid out by Bramante, for the Cardinal Hippolito d'Este, on the site of the Emperor Hadrian's villa; or the Villa Lante near Viterbo, designed by Vignola, from whose hands also came the villa at Caprorola. The Villa Giusti at Verona is another charming example of Italy's garden-art, while at the Palazzo Caserta we may see the extraordinary series of cascades laid out by Van Vitelli. Many others might be named, such as the Villas Medici, Borghese, Albani, and Pamphilj Doria, at Rome; Villa Gamberaia in Florence, and Villa Aldobrandini at Frascati; and the house and gardens clustered on the lovely Isola Bella on Lake Maggiore.

The designer of gardens may learn much from those of Italy, but he must not think to reproduce their inimitable charm under cold northern skies. Their haunting beauty, their mystery, are linked to the land on which they have grown. Deserted, many of them neglected, moss-grown, and strewn with dead leaves, they seem to echo voices long silent, and to recall

The tender grace of a day that is dead.

France.—It is easy to trace the influence of Italy on all the pages of the history of garden-making in France, but the latter developed a style quite characteristic of the people and the country. France is a land of wide plains rather than steep hills, and we find a breadth, an expansiveness in the treatment of grounds not seen elsewhere. The design of monumental buildings, their grouping and their environment, and the disposition of "*le tout ensemble*," to use one of their own phrases, is a field in which the French have no rival.

The earlier workers in the garden-art of the French Renaissance counted among their number such men as Androuet du Cerceau, the architect, well known as the author of *Les plus Excellents Bastiments de France*, Bernard Palissy, more famous in another of the lesser arts, Jacques Debrosse, architect, and others, such as the Mollets and Olivier de Serres. But all these were eclipsed by the brilliant designer, André le Nôtre, born in 1613. He had certainly extraordinary opportunities, including such works as the laying out of the grounds of Versailles for Louis XIV. He had full scope in the two hundred acres which surrounded the palace, and he could draw on the apparently bottomless purse of the "Grand Monarque." His other works included such mansions as Chantilly, St. Cloud, and Vaux-le-Vicomte. The characteristics of his work are great breadth and stateliness.

Everything Le Nôtre designed was on the most generous lines—paths, terraces, and avenues, broad and noble, ornamented with water, especially in the shape of fountains decorated with sculpture, and basins containing wide expanses of water. Le Nôtre's gardens formed an admirable background to such figures as grace the canvases of Watteau, where life was a ceaseless *fête-champêtre*, and whose gardens were but *salons en plein air*. These scenes, too, have changed, kings and courtiers are gone, and the wonders of Versailles have other spectators, as Alfred de Musset writes:—

O dieux! O bergers! O rocailles!
Vieux Satyres, Termes grognons,
Vieux petits ifs en rangs d'oignons,
O bassins, quinconces, charmilles,
Boulingrins pleins de majesté,
Où, les dimanches, tout l'été
Bâillent tant d'honnêtes familles.

England.—Coming to our own country, we find the first trace of gardening during its occupation by the Romans. The troublous times that followed their departure were not favourable to the arts of peace, but after the Norman Conquest we find the words *horti* and *hortuli* occurring in the Domesday Book. As time went on gardens were laid out in connection with the monasteries, and small gardens were made within the precincts of castles, chiefly for the use of the ladies of the household. These were high-walled enclosures, laid out as a small green spot, with "knots" or beds of flowers, and seats, and perhaps an arbour.

We have few accounts of the gardens of mediæval times, one of the earliest being found in the *Kingis Quair*, written by James I. of Scotland during his eighteen years' captivity in England, at the beginning of the fifteenth century. He writes, that to beguile the tedium one day, "Unto the wyndow gan I walk in hye, to se the warld and folk that went forby," and goes on:

Now was there maid fast by the Touris wall,
A gardyn faire, and in the corneris set
Ane herbere grene, with wandis long and small
Railit about; and so with treis set
Was all the place, and hawthorn hegis knet,
Thot lyf was non walking there forby,
That myght within scarse ony wight aspye.

So thik the bewis and the lewes grene
Beschadit all the aleyes that there were,
And myddis euery herbere myght be sene
The scharpē grenē suetē ienepere
Growing so faire with branchis here and there,
That, as it semyt to a lyf without,
The bewis spred the herbere all about.

An interesting illumination in the British Museum, made about the end of the same century, illustrating a copy of Chaucer's translation of the *Roman de la Rose*, shows the advance made in the laying-out of gardens. The garden forming the scene of the picture is enclosed by an embattled wall of stone, with a central division of trellis work, the most prominent feature of one side of the garden being a fountain in the centre of a circular basin with a stone kerb, while the other side is laid out formally in plots or beds.

We pass on to the days of the Tudors, however, before we get any more detailed accounts of gardens. George Cavendish, gentleman-usher to Cardinal Wolsey, describes some of the features of the surroundings of the palace which the great Cardinal commenced to build for himself in 1520 at Hampton Court :—

My garden sweet, enclosed with walles strong,
Embanked with benches to sytt and take my rest,
The knottes so enknotted, it cannot be exprest,
With arbours and alyes so pleasant and so dulce,
The pestilent ayres with flavors to repulse.

About this time the influence of the Renaissance of the arts in Italy began to be felt in England, and Henry VIII., when building the palace of Nonsuch, in Surrey, enlisted the aid of Italians. Paul Hentzner, travelling in England in 1598, thus describes the surroundings of Nonsuch, erected some sixty years previously :—

The palace itself is so encompassed with parks full of deer, delicious gardens, groves ornamented with trellis-work, cabinets of verdure, and walks so embrowned with trees, that it seems to be a place pitched upon by Pleasure herself, to dwell in along with Health. In the pleasure and artificial gardens are many columns and pyramids of marble, two fountains that spout water one round the other like a pyramid, upon which are perched small birds that stream water out of their bills. In the grove of Diana is a very agreeable fountain, with Actæon turned into a stag, as he was sprinkled by the goddess and her nymphs, with inscriptions.

English gardens, or at least those of any size, had already assumed a decorative character. Figured flower-beds, straight alleys, fountains, and sculpture had become features of the garden, and it was about this time that the topiary art was first practised in England. The trimming of such trees as yew, hornbeam, holly, and privet into square and formal shapes was doubtless due to the necessity for keeping garden hedges within reasonable bounds. The custom also satisfied the æsthetic feeling that formal divisions near the building to which the garden was attached should be treated in harmony with the house. The objection that any such clipping is unnatural is set aside by the consideration that a row of bushes or trees in an absolutely straight line is equally unnatural. The whole arrangement of a garden should be frankly admitted as an interference with Nature. Man needs these for shelter to his dwelling and his garden, and they are shaped to subserve his needs and purposes. Is man for Nature, or Nature for man ? We

mow our lawns. Why may we not clip our hedges? At the same time, topiary work should be on the simplest lines possible. Bacon, in his essay, says on this subject, "Advising, nevertheless, that whatsoever form you cast it into; first, it be not too busie, or full of Work; wherein I, for my part, do not like Images cut out in Juniper, or other Garden-stuff; they are for children. Little low Hedges, round like Welts, with some pretty Pyramids, I like well."

Bacon's essay had doubtless a powerful influence in moulding the design of the gardens of Elizabethan and Jacobean times. At least one garden is said to have been laid out in accordance with the great Chancellor's views—that at Moor Park, belonging to the Countess of Bedford.



FIG. 4.—WILTON HOUSE, WILTSHIRE: FOUNTAIN IN THE ITALIAN GARDEN.
Reproduced by permission from Mr. H. Inigo Triggs' *Formal Gardens in England and Scotland* (Bateford, 1902).

Sir William Temple wrote concerning this garden:—

The perfectest Figure of a Garden I ever saw, either at Home or Abroad, was that of Moor Park, in Hertfordshire. . . . I will describe it for a model to those that meet with such a situation, and are above the regards of common Expence. It lies upon the Side of a Hill (upon which the House stands) but not very steep. The Length of the House, where the best Rooms and of most Use or Pleasure are, lies upon the Breadth of the Garden, the Great Parlour opens into the middle of a Terras Gravel-Walk that lies even with it, and which may be, as I remember, about three hundred Paces long and broad in Proportion, the Border set with Standard Laurels, and at large Distances, which have the Beauty of Orange-Trees, out of Flower and Fruit. From this Walk are Three Descents by many Stone Steps, in the Middle and at each End, into a very large Parterre. This is

divided into Quarters by Gravel-Walks, and adorned with two Fountains and eight Statues in the several Quarters; at the End of the Terras-Walk are two Summer-Houses, and the Sides of the Parterre are ranged with two large Cloisters, open to the Garden, upon Arches of Stone, and ending with two other Summer-Houses even with the Cloisters, which are paved with Stone, and designed for Walks of Shade, there being none other in the whole Parterre. Over these two Cloisters are two Terrasses covered with Lead, and fenced with Balusters; and the passage into these Airy Walks, is out of the two Summer-Houses at the End of the first Terras-Walk. The Cloister facing the South is covered with Vines, and would have been proper for an Orange-House, and the other for Myrtles, or other more common Greens. From the middle of the Parterre is a Descent by many Steps flying on each side of a Grotto, that lies between them (covered with Lead, and flat) into the Lower Garden, which is all Fruit-Trees ranged about the several Quarters of a Wilderness which is very shady; the Walks here are all green, the Grotto embellished with Figures of Shell-Rock-Work, Fountains and Waterworks. If the Hill had not ended with the Lower Garden, and the Wall were not bounded by a common Way that goes through the Park, they might have added a Third Quarter of all Greens; but this Want is supplied by a Garden on the other Side of the House, which is all of that Sort, very Wild, Shady, and adorned with rough Rock-work and Fountains.

" The perfectest Figure of a Garden " was evidently influenced by the gardens of Italy, and the same influence was clearly at work in the design of the gardens at Theobalds, Hatfield, Wilton, Montacute, and others laid out at this period.

No great change in garden design is visible until we reach the days of Charles II., when the influence of Le Nôtre made itself felt in England. It has been alleged that the gardens of Greenwich and St. James's Palace came from his hands, but without sufficient proof. It is well known, however, that the King's chief gardener, John Rose, worked for some time under Le Nôtre. The impress of the French master's work at Versailles and elsewhere is to be clearly traced in such gardens as those at Chatsworth, Badminton, and Melbourne Hall, in Derbyshire. The great attention given to both garden design and horticulture in England by men of culture is evidenced in the writings of John Evelyn, and others.

With the coming of William III. and Mary the Dutch style of gardening became fashionable. The characteristics of the Dutch gardens of that day were excessive formality and symmetry, giving a stiff appearance to the whole garden. The abundant ornaments were of a small and trivial order, and the trees were clipped into all sorts of ridiculous shapes. This fashion, for it was little else, soon brought about the complete decay of garden-craft in the country. The quaint conceits of the gardens of Levens Hall, Westmoreland, and of Packwood, in Warwickshire, are good examples of the absurd length to which the *ars topiaria* was carried. Part of the gardens of Hampton Court were also remodelled in the Dutch style. English garden design had thus reached a stage in its history of which the wits of the day were not slow to take advantage. When writers of the calibre of Addison and Pope made the garden taste of the hour the butt of their ridicule, it soon succumbed, for its vitality was spent and gone.

Pope turned his sarcasm on to the Dutch fashion in a paper which appeared in the *Guardian* in 1713, from which the following is extracted :—

We seem to make it our study to recede from nature, not only in the various tonsure of greens into the most regular and formal shape, but even in monstrous attempts beyond the reach of the art itself: we run into sculpture, and are yet better pleased to have our trees in the most awkward figures of men and animals than in the most regular of their own. A citizen is no sooner proprietor of a couple of yews, but he entertains thoughts of erecting them into giants like those of Guildhall. I know an eminent cook who beautified his country-seat with a coronation-dinner in greens, where you see the champion flourishing on horseback at one end of the table, and the Queen in perpetual youth at the other.

For the benefit of all my loving countrymen of this curious taste, I shall here publish a catalogue of greens to be disposed of by an eminent town-gardener, who has lately applied to me upon this head. He represents that for the advancement of a politer sort of ornament in the villas and gardens adjacent to this great city, and in order to distinguish those places from the mere barbarous countries of gross nature, the world stands much in need of a virtuoso gardener who has a turn to sculpture, and is thereby capable of improving upon the ancients in the imagery of evergreens. I proceed to his catalogue as he sent it for my recommendation:

Adam and Eve in yew; Adam a little shattered by the fall of the tree of Knowledge in the great storm; Eve and the serpent very flourishing.
The tower of Babel not yet finished.
St. George in Box; his arm scarce long enough, but will be in a condition to stick the dragon by next April.
A green dragon of the same, with a tail of ground-ivy for the present.
N.B. These two are not to be sold separately.
Edward the Black Prince in Cypress.
A pair of giants, stunted, to be sold cheap.
A Queen Elizabeth in Phyllirea, a little inclining to the Green sickness, but of full growth.
An old Maid of honour in wormwood.
A topping Ben Jonson in Laurel.
Divers eminent modern poets in bays, somewhat blighted, to be disposed of a pennyworth.
A quick-set hog, shot up into a porcupine, by its being forgot a week in rainy weather.
Noah's Ark in holly, standing on the mount, the ribs a little damaged for want of water.

The formalists had carried their freaks too far, and brought the art of the garden into ridicule, not only by distorting the works of Nature to the level of absurdity, but the gardeners of the time extended their operations beyond the garden walls and sought to straighten out and drill the park and woods. The tables were soon turned, and the garden itself was invaded by the wildness of Nature.

Horace Walpole in his essay, *On Modern Gardening*, also criticised the "verdant sculpture" of the day, and commended Bridgman, who was the first garden designer to break with the craze, for having banished it. He writes: "He enlarged his plans, disdaining to make every division tally to its opposite; and though he still adhered much to straight walks with high clipped hedges, they were only his great lines; the rest he diversified with wilderness and with loose groves of oak, though still within surrounding hedges."

The movement which now set in was only one phase of the wave of romanticism which swept across the fields of both art and literature. The movement was doubtless needed to break down a dead formalism, but brought with it some of the iconoclast's excesses. The sham Gothic of Horace Walpole's house at Strawberry Hill was quite in harmony with his views on what became known as "landscape gardening." The idea that underlies the phrase is the sweeping away of any demarcation between the garden and the landscape beyond, and the attempt to reproduce landscapes in imitation of the works of the great painters. The fashion thus ran in a different direction.

Walpole takes occasion in his essay to praise the work of William Kent in this connection. Kent was an architect of considerable ability, and also a painter. Walpole says that "He leaped the fence, and saw that all nature was a garden." Thinking of the many old gardens which were destroyed as a result of the new style, an American writer has grimly expressed the regret that Kent's leap was not immediately followed by a fatal fall. Walpole continues, however: "The pencil of his imagination bestowed all the arts of landscape on the scenes he handled. . . . Selecting favourite objects, and veiling deformities by screens of plantation; sometimes allowing the rudest waste to add its foil to the richest theatre, he realised the compositions of the greatest masters in painting." Kent was hailed as a great genius. One of his theories was that Nature abhors a straight line; that gardens ought to be laid out in studied irregularity, with no straight lines but with serpentine curves. Mason, the poet, eulogising Kent in his poem, *The English Garden*, wrote:—

He by rules unfettered boldly scorns
Formality and method—round and square
Disdaining, plans irregularly great.

There soon commenced the destruction of many of England's gardens. The good went with the bad, and many an old English pleasaunce, with its quaint charm and old-time memories, was

torn up, the " pleached bowers " destroyed, and the terraces flung down, so that the grass of the woods might be brought up to the windows of the mansion, in order, as far as possible, to give the impression that the landscape was in its pristine state. In order to coax the grounds up to the level of the great masters' pictures Kent had resort to many expedients to give a fictitious interest to a landscape which he thought was in need of being " chastened and polished," and so imitation rivers were made, with broken bridges over them, and manufactured ruins erected to give a romantic touch to the view. He even went the length of planting dead trees " to give the greater air of truth to the scene "!

The most extraordinary personality of this movement, however, was Lancelot Brown, known as " Capability " Brown from his habit of speaking of the " capabilities " of the place he was

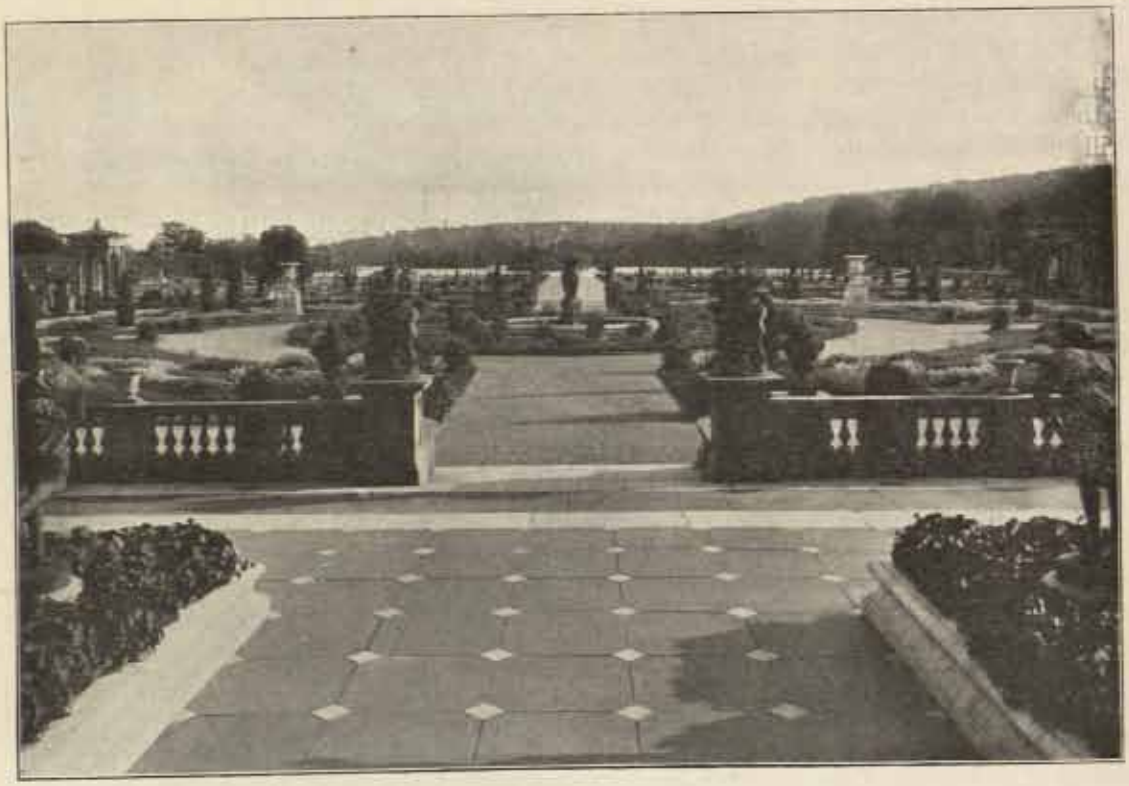


FIG. 5.—TRENTHAM. (Sir Charles Barry, R.A., Architect.)

remodelling. He was originally a kitchen-gardener and had no training in any of the arts, yet, nevertheless, he was greatly in request from end to end of the country, and laid out numerous estates after his style, which consisted in the formation of winding paths, the planting of irregular " clumps " of trees, and the hollowing out of flat ground here and there in heaps so as to imitate Nature " in her best moods."

Looking back now, it seems almost incredible that this man could be said to have had almost supreme control over the art of gardening in England for nearly half a century. The " immortal Brown," " omnipotent magician," erstwhile kitchen-gardener, had surely cast a powerful spell over his *clientèle* when he was worshipped as " the living leader of the powers of Nature." Being so, it was a small thing that Chatham should write that Brown " shares the private hours of the King, dines familiarly with his neighbour of Sion (the Duke of Northumberland), and sits down at the tables of all the House of Lords." He had special powers in the formation of artificial

sheets of water, which he placed in all possible and impossible positions. Regarding some work of this character which he carried out at Blenheim, he boasted that the Thames would never forgive him! His *chef d'œuvre* was Stowe in Buckinghamshire.

The craze for irregularity and wriggling paths spread to the Continent, and many gardens were replaced by a "jardin à l'anglaise."

But even Walpole came to regret the ruin which this revolution had caused. In one of his letters telling of a visit to his house at Houghton, he writes: "Those groves, those alleys, where I have passed so many charming moments, are now stripped up or overgrown; many fond paths I could not unravel, though with a very exact clue in my memory. I met two gamekeepers and a thousand hares! . . . I loved this garden; Houghton, I know not what to call it, a monument of grandeur or ruin."

Brown was followed by Humphrey Repton, and the principles on which he worked are given in his own words, as they form an admirable epitome of the views of the "landscape" school of garden designers: —

> First, it must display the natural beauties, and hide the natural defects of every situation; it should give the appearance of extent and freedom by carefully disguising or hiding the boundary; thirdly, it must studiously conceal every interference of art, however expensive, by which the scenery is improved; making the whole appear the production of nature only; and fourthly, all objects of mere convenience or comfort, if incapable of being made ornamental, or of becoming proper parts of the general scenery, must be removed or concealed.

During the nineteenth century the art of garden design has in the main followed the landscape school, although some notable exceptions have to be recorded here and there, such as the work of Sir Charles Barry, Nesfield, and others. As a rule, however, the views of garden designers were in harmony with the sentiments expressed by the Abbé De Lille in his poem, *Les Jardins*:—

> Les jardins appelaient les champs dans leur séjour;
> Les jardins dans les champs vont entrer à leur tour:
>
> Chacun d'eux a ses droits; n'exclusons l'un ni l'autre,
> Je ne décide point entre Kent et Le Nôtre.

Within recent years, however, a number of architects have directed attention to the chaotic state of affairs, and enthusiastically advocated a revival of the formal garden. Foremost among these should doubtless be placed the name of the late John D. Sedding, who wrote so sympathetically on the subject. There are others, architects and garden designers, whose works we have the pleasure to admire, but whose names it were invidious to mention, since happily they are still with us.

OF THE SITE AND ITS CHARACTERISTICS.

Before taking any steps towards laying out the grounds surrounding a building the site should be carefully surveyed. No preconceived arrangement should be allowed to fetter the mind of the designer. The site itself should inspire the design. The position of the house should not be fixed until the whole scheme has been thoroughly considered. In order that both house and garden shall be in harmony with the *genius loci*, careful consideration should be given to the climatic conditions, the general characteristics of the whole landscape, the contour and levels of the ground available, the nature of the subsoil, the aspect of the site, the prospects from the house, both what it is desirable to keep in view and what it is necessary to screen from sight. Note should also be taken of the presence of water, with the direction of its course, and of what trees may be on the site.

The climatic conditions have a great influence both on the character and the probable success of the garden, and the design should provide whatever additional shelter may be required

to protect the garden from cold winds. The different conditions which may be found in, say, Italy, North America, and Great Britain, greatly affect the character of the garden as well as the design and planning of the house.

The levels of the site will determine, to a great extent, the position of the house and lawn, and the direction of the various roads and paths, easy access to all parts being kept in view. Level ground permits of the easy adaptation of a formal design, but a sloping site is much better, while a hilly site may be productive of a most interesting scheme. An old writer, Estienne,

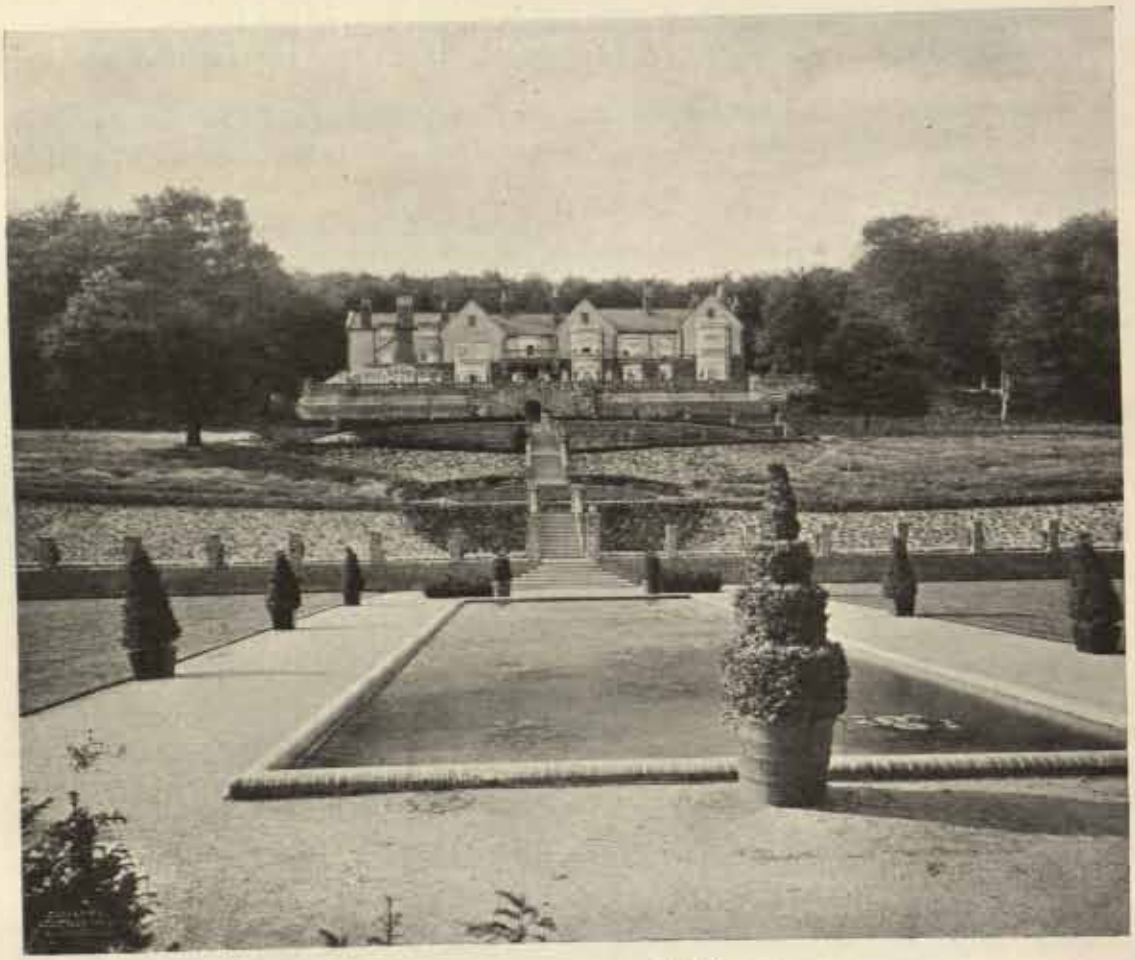


FIG. 6.—KEARSNEY COURT, DOVER. (T. H. MAWSON.)

wrote as to this point, towards the end of the sixteenth century : " You may also, if your ground be actually so seated, or if your industrie please so to bring it to passe, make your Garden rise and mount by severel degrees, one levell ascending above another, which is exceeding beautifull to the eie, and very beneficiall to your flowers and fruit trees, especially if such ascents have the benefit of the Sun rising upon them." Good drainage is also more easily effected on a sloping site.

In selecting a site the greatest care should be taken to secure a porous substratum of gravel or marl, with a good covering of loam. A subsoil of clay should be avoided at all costs, as being good for neither house nor garden.

So far as aspect is concerned, the ideal site would lie with a slope towards the south-east,

with shelter given either by hills or trees from the north and north-east, or other direction from which the site may be exposed to cold winds. The flower-gardens should be placed where they will get all the sunlight possible throughout the day. The aspect of the house and garden should not be sacrificed to any prospect, however desirable. If there be considerable latitude in the placing of the house, choice should be made of a place where the best prospects can be seen from the north-east or north-west. Instead of setting the house and garden to face a cold and damp aspect for the sake of a view, points of vantage commanding the scenery should be arranged in the garden, in which case these would form points of interest in its design.

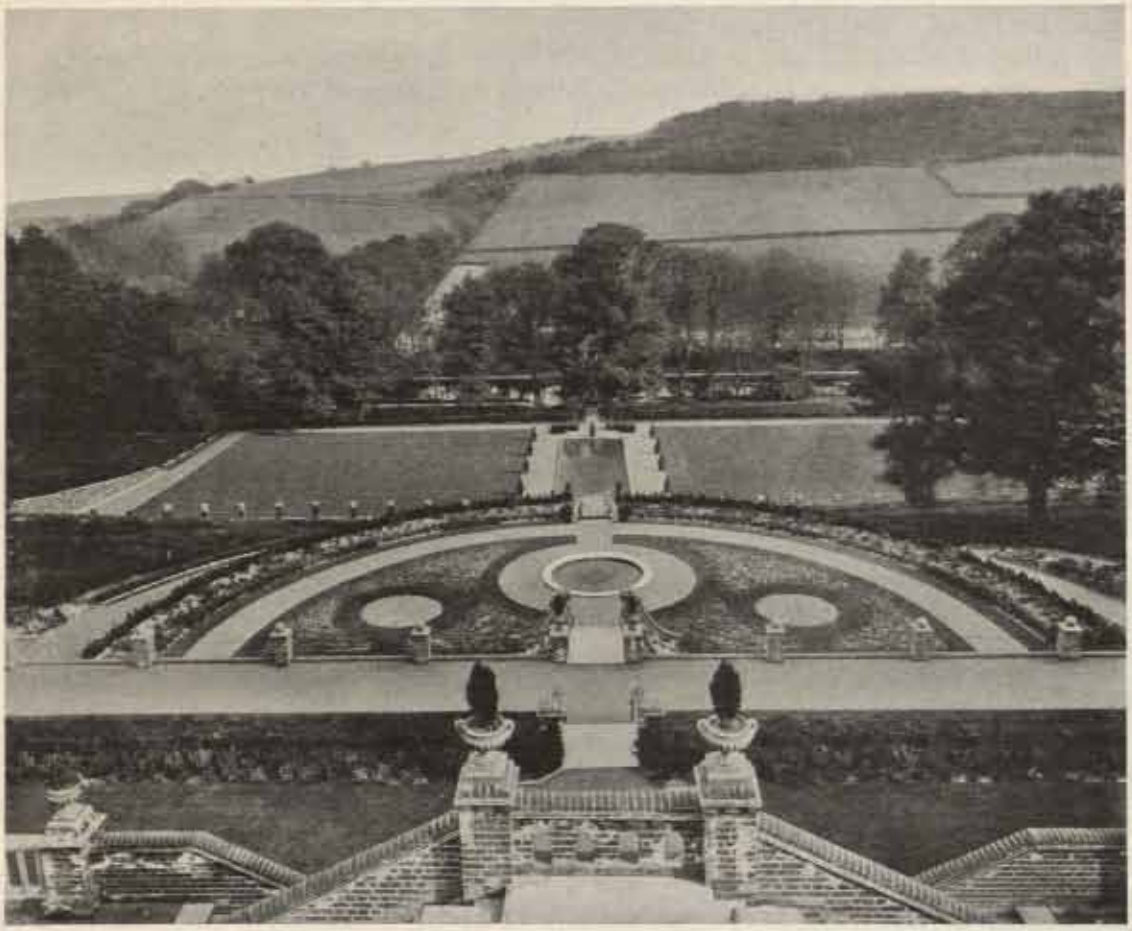


FIG. 7.—KEARSNEY COURT, DOVER: VIEW FROM THE BALCONY. (T. H. MAWSON.)

Another necessity is the presence of an ample and constant supply of pure water. If a stream of running water crosses the grounds, it will be a source of added beauty to the garden.

The character and healthiness of the vegetation on all parts of the site should be ascertained, with a view to obtaining guidance as to the best disposition of the different parts of the grounds. All old trees should be spared as far as possible.

The characteristic features of the site having been fully ascertained, and these made the basis of the general plan of treating the grounds, the location of the house should then be determined.

OF THE HOUSE IN RELATION TO ITS SURROUNDINGS.

The placing of the house in its right position on the site calls for the utmost care, and its plan and position should not be fixed finally until a complete survey of the whole area has been prepared, the levels ascertained, and the approaches and paths tentatively arranged.

As the whole interest of the site circles round the house, its position must be studied with full regard to all the parts it has to play in the life of its occupants. It must be convenient of access at all times, the various entrances must be all arranged for, and the proper aspect and outlook secured for every room. Ready means of communication must be provided to stables, garage, kitchen garden, &c., without destroying the privacy required in the parts of the garden which are linked with the principal rooms.

Although a level site may be the most suitable one for a stately mansion on classic lines, a site of various grades may be made equally suitable for a house of less pretension. A country



FIG. 8.—FAIRNIELEE, SELKIRKSHIRE. (J. J. Burnet, LL.D., A.R.S.A., Architect.)

house skilfully fitted on to an irregular and rugged site, may, by that very means, acquire a special charm. It will not have the appearance of having been dumped down, but will seem rather to have grown naturally from the soil.

The existing features of the site, its contour and general effect, should be as little disturbed as possible, not only for economical reasons, large alterations in earthwork being always costly, but because the character of the garden might be thrown out of harmony with its surroundings and a forced and unnatural appearance be the result.

The house ought to be placed where it will get sufficient shelter from northerly winds, with at the same time full exposure to the south and south-east. It should be as well elevated as possible, so long as the access does not become laborious to man and beast, and the situation is not exposed. This will lift the house well clear of the fogs and vapours which hang about low-lying ground, especially where water is present, and make it much healthier for its inmates. It will also in all probability secure that the house and garden are not overlooked to such an extent as to interfere with their necessary privacy.

At this juncture a few words on the design of the house itself may not be out of place. No building should be designed without taking its environment into account. The architecture of the city is naturally more formal than that of the country. The city house is often no more than a façade, and we take what is behind it for granted. In the country, however, we can see all round the house, which, surrounded by a garden, seems to take on a more human, a more lovable quality. Bacon well wrote of gardening: "It is the greatest refreshment to the spirits of Man, without which Buildings and Palaces are but gross Handy-works."

Since the house is to strike the keynote for its own immediate environment, it is of the first importance that the house itself should be in sympathy with the surrounding country. How often one sees a house in the country that strikes a false note, that jars on the scene. Many a lovely spot is destroyed by some "desirable villa," with its tawdry, restless features. How the



FIG. 9.—HILDON, HANTS. (Sir Aston Webb, C.B., R.A., architect.)

beautiful Italian word has lost caste in the hands of the British speculative builder! Eclecticism may be allowed some place in the commercial city, but in the country buildings should not be conspicuous, pushful, shouting for attention. A building designed in harmony with its surroundings gives the needed touch of human interest to a wild and wooded country, and the touch should bring with it an added charm to the scene. It cannot do this, however, if its materials, its shape, and its colour, are exotic to the locality. Has not one often seen a house that seems to have strayed many miles from its home? The house in the country should have the look of belonging to its environment. The secret of the beauty of the country house and its unity with its surroundings lies in the use of the natural materials of the district. Imported materials which affect the appearance and colour of a building ought to be used with the greatest possible caution. The architect will indeed be well advised if he dispenses with their use altogether, and builds his house with the stones of its own valley, as Longfellow has happily put it:—

That is best which lieth nearest,
Shape from that thy work of art.

The architect should study the character of the scenery, and mould his building accordingly. He may build as rich a dwelling as the owner may wish in flat and softly undulating country, but he will want to design simply and broadly in the presence of Nature in her more powerful moods, when his work lies at the opening of some purple glen and mountain peaks close the horizon.

Having touched on the placing of the house and on its design in relation to the surrounding country, we have now to consider the treatment of the garden in connection with the house.

The garden is the link between the house and the outside world. Without it a building is left in a sort of nakedness. The house is a work of man's making, and that is why we feel instinctively that the garden should not be wild unfettered Nature, but Nature subdued and set out in ordered grace and beauty.

There should not only be harmony between house and garden, but the two combined should form one complete, well-balanced unity. Assuming that the building is a real work of art, however simple in its lines, the garden should form a worthy and becoming setting for it. The one should be the complement to the other, the house being the central feature of the garden and the garden the corollary to the house.

In order to this, the style and character of the house, palatial or unpretending, stately or homely, should be reflected in the treatment and accessories of the garden. The house should take root in the garden, and the garden should be simply an expansion of the house. A proper base for the building, such as a terrace, helps much to unite it with the garden, while such extensions of the building outwards as porches, loggias, and verandahs, carry the house into the area of the garden. From the terrace on which these all stand the eye is carried down the steps and along the terrace walls to such structural accessories as garden houses, pergolas, arbours, seats, &c. Even in our climate, and especially in the southern parts of the island, there is a movement towards a more outdoor life during the summer months, and the garden should contain the open-air rooms of the house. In his garden a man should feel himself still within his home.

Not only should the house unite itself with the garden, but the garden should lay hold of the house. Nothing binds the house better to the soil, in the decorative sense, than climbing plants. These soften the hard lines of the stone or brick and drape the walls with a delicate veil of Nature's weaving. Shrubs carefully selected as to colour and probable ultimate size may also be planted near the house in such a way as to lead the eye from the grounds to the house, where the creepers carry the green tints of the garden up to roof-tree and gable.

Care should be taken to prevent climbing plants from running riot over a building, leaving it shapeless in appearance, and in the case of the common ivy, probably making it damp. Ivy and Virginian creeper require to be kept rigorously within bounds, for the walls of the house should be only partially veiled with a transparent drapery, never concealing but only adorning the walls which it embraces. More advantage should be taken of the abundant variety of climbing plants at our disposal. In addition to those mentioned, there are wistaria, jasmine, honeysuckle, with its delicious scent, clematis, climbing roses, Vitis inconstans, Tropæolum speciosum, with its flaming flowers, and, where less colour is desired, the magnolia and cotoneaster. Time will stain the walls with grey and gold, and "Nature's noblest tapestry" will stretch its green tendrils and gay flowers lovingly over the house, binding it to the garden.

> So let the humble artist stand aside,
> Prepare the canvas, and the palette set
> For those sure hands,
> Which touch by touch add purple to his roofs,
> And clothe his walls with woodbine and with rose.

In order to unite the garden more closely with the house, in the daily life of the home, it should be planned with an open-air room, facing the south, opening directly on to the garden and

conveniently placed with relation to the dining-room and also the kitchen service. In the summer months it might be used as a breakfast room, and it could be used as a sitting-room, when not too cold, during a good part of the year. A few pieces of strong simple furniture are all that is required to make the room a delightful accessory to any house.

In the climate of England such a room is more likely to be useful than the verandah or "piazza" so universal in America, where the excessive heat in summer drives the people outside their houses, while at the same time the strength of the sun renders shade absolutely necessary. The American verandah is thus a direct and legitimate outcome of climatic conditions. In

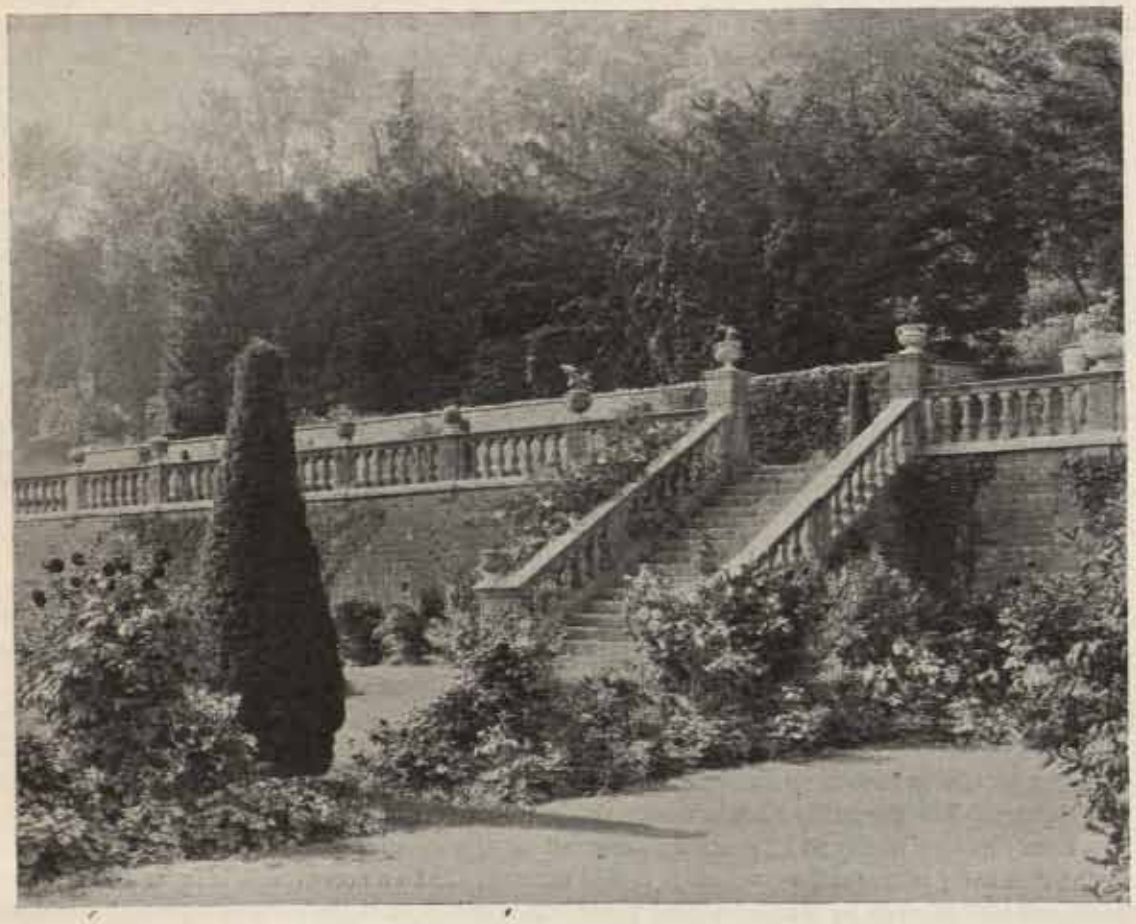


FIG. 10.—ST. CATHERINE'S COURT, SOMERSETSHIRE: THE UPPER TERRACE.

Reproduced by permission from Mr. H. Inigo Triggs' *Formal Gardens in England and Scotland* (Batsford, 1902).

building verandahs care should be taken not to have them needlessly large, and they should be designed so as to seem a real part of the house and not a shed set up against it. This is more likely to be attained if they can be brought under the sweep of the roof of the house itself. In this country verandahs must not be placed where they will darken any room. In England a carefully treated loggia leading to the garden is likely to be more successful as a design, as well as more useful, than the American piazza.

The house should have a good base on which to stand, a sufficient platform on which it is elevated, at least two feet above the level of the garden generally. This makes the building airier and healthier, and adds greatly to its dignity, while from both house and terrace a better view

is had of the garden. If the house is on a sloping site this may be easily arranged. The terrace should be on naturally formed ground if possible, and if adjustment has to be made, care must be taken to guard against an artificial effect. The terrace should have as long a line as possible, and should be sufficiently broad, in proportion to the size of the house.

The retaining wall forming the front of the terrace should be of the same material as the house and be treated similarly, so as to secure unity of effect. The terrace wall with its flights of steps is invaluable as a link between the house and the grounds.

If the terrace is low, a simple stone cope along the top of the retaining wall is all that is required, but when it is higher than two or three feet a low terrace wall is necessary. This may be quite plain or be in the form of a balustrade, according to the size and style of the house. Balustrades are necessary only in connection with buildings of a palatial order. Plain stone walls, decorated with climbing plants, are quite in harmony with most country houses.

No rule can be laid down for the width of terraces or the number of them to be used in laying out a garden, as these depend entirely on the size and levels of the ground being treated. For the sake of simplicity of effect, however, they should not be multiplied.

Although cheaper in the first instance, grass slopes are but poor substitutes for terrace walls. Slopes have no architectonic value and contribute nothing to the unity of house and garden. On the contrary, they have in some instances a most unpleasant effect. The grass on these slopes is difficult to keep in good order and they give no such opportunity to the gardener as the walls afford.

Philip Miller, nearly two hundred years ago, wrote thus on the utility of terraces :—

> There is a peculiar Excellency in Gardens that have terrasses; because from the height of one Terrass, all the lower parts of the Garden may be discovered: and from others the Compartiments are seen, which form so many several Gardens one under another and present us with very agreeable Views, and different Scenes of Things, if the Terrasses are not too frequent, and there be good lengths of Level between them.

OF SOME PRINCIPLES OF GARDEN DESIGN.

The environment of a building requires careful consideration. Especially is this the case when it is to be surrounded by a garden of some extent, and still more so when beyond the garden there lies a wide extent of beautiful country.

Architecture clearly proclaims itself to be an art of man's devising. The surrounding scenery—plain, valley, hill and mountain—are what man calls Nature. The task before the designer of the garden is to bring about, by its medium, a harmonious alliance betwixt Art and Nature. The garden is Nature woven round the house under the guiding hand of Art.

Every garden ought to be specially designed for the building which it encloses and adapted to the character of the site on which it is laid out. If that be accepted it is futile to lay down hard-and-fast rules or to prepare model plans. Nevertheless, there are some general principles which ought to be borne in mind, and it is proposed to deal with these briefly.

1. *Utility.*—The first essential is that the garden shall be so planned as to be useful and convenient in the daily life of the occupants of the house. So much should this be the case that it will be used as an outdoor extension of the house at all times that the weather may permit, and especially in warm countries where a great deal of time is necessarily spent out-of-doors. The different parts of the garden and its accessories, such as kitchen-garden, conservatory, tool and potting houses, &c., should all be arranged so as to permit of the work of the house and garden going on smoothly and with the least possible loss of time. Roads and paths should be as direct and easy as possible, convenient accesses by carriage, cart, or barrow should be laid out where necessary and tradesmen's entrances provided. Servants' quarters should in no case overlook the lawns or the parts of the garden adjacent to the principal rooms. A reasonable amount of

privacy should be obtainable in the garden, especially when it is used for reading and study. Shelter from the prevailing winds and shade from the sun should also be provided, with seats and resting-places in convenient positions.

2. *Truthfulness.*—The garden should not pretend to be what it is not, a piece of Nature in its virgin state. Nor should it pretend to be larger than it really is by the concealment of its boundaries, one of the falsities of the landscape school, which brought forth that wonderful invention, the "ha-ha." The garden should plainly confess man's hand in its making, and its enclosure should be shown straightforwardly and without reserve. No fear should be felt that the beauty of the garden will be marred by abandoning the attempt to counterfeit wild Nature.

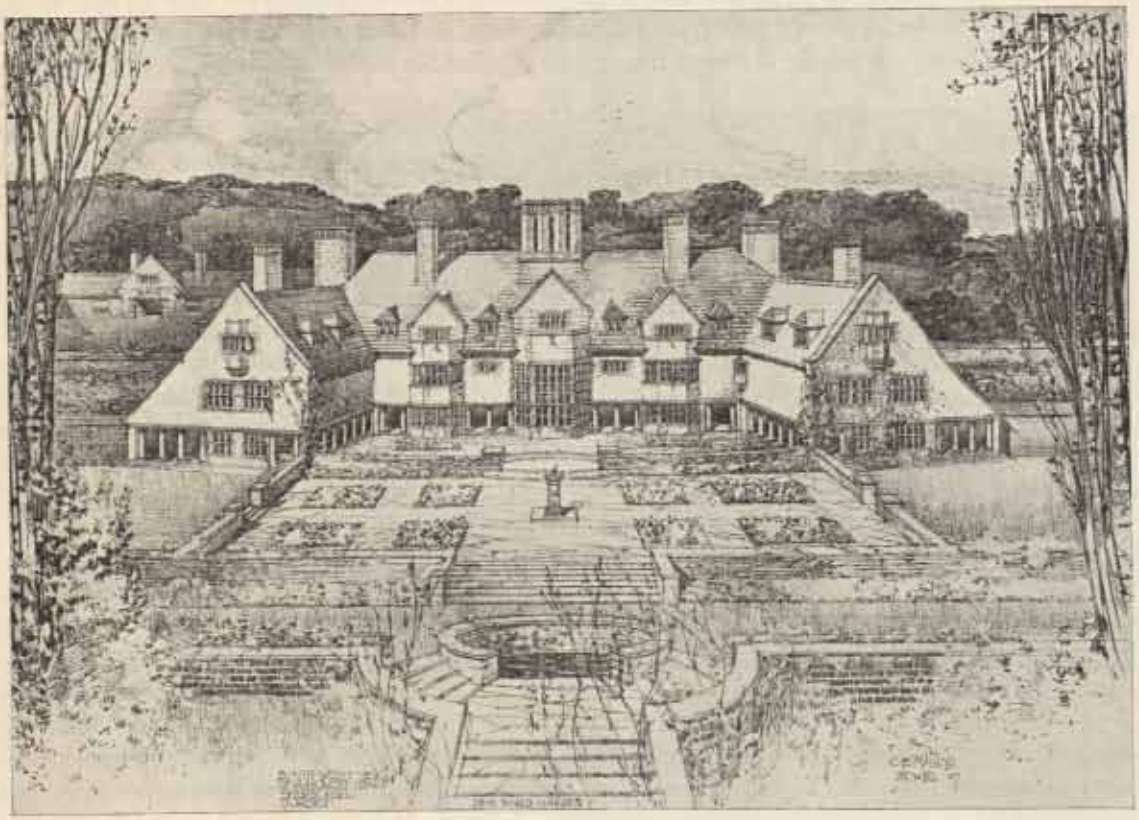


FIG. 11.—HOUSE AND GARDEN NEAR SHERBORNE. (C. E. Mallows, Architect.)

The highest beauty is ever linked with truth, and the garden-maker may well listen to the message of Keats' Ode to a Grecian Urn :—

> "Beauty is truth, truth beauty"—that is all
> Ye know on earth, and all ye need to know.

3. *Simplicity.*—Whether large or small, a garden should be simple in its general design. Simplicity is not baldness, for true simplicity is in no way inconsistent with the highest degree of richness, where that may be desired. Simplicity is the result of a well-ordered plan, by which the garden becomes not a mere collection of trees, shrubs, and flowers, but a coherent and well-proportioned entity, beautiful as a whole as well as in its details. This desirable quality in a garden is most often destroyed by crowding too many features into the space available. The desire to have specimens of as many different kinds of trees, shrubs, and plants as possible is also destructive of breadth and unity of effect. Unless the intention is to lay out a nursery it is not desirable to

attempt an exhibition of all the riches of the British arboretum. Ruskin wrote: "A forest composed of all manner of trees is poor, if not disagreeable in effect; a mass of one species of tree is sublime." Of course, it is not proposed to limit the trees in a garden to one, or even two or three kinds. Variety is also desirable, within limits, and so long as it does not destroy the simplicity and restfulness of effect which should pervade the garden which embosoms a home—

> An English home—gray twilight pour'd
> On dewy pastures, dewy trees,
> Softer than sleep—all things in order stored,
> A haunt of ancient peace.

4. *Fitness.*—In order to secure that appropriateness which is desirable in a garden, all its features and accessories should reflect the character, style, and scale of the house, and be conceived in the same spirit. A totally different treatment is called for in the case of a princely suburban mansion from that of a country cottage, and the grounds of a casino would follow different lines from those surrounding the buildings of a university. Congruity in the more architectural accessories should be carefully studied. A common fault is to have these too elaborate and ambitious for the house to which they are adjuncts.



FIG. 12.—TAN-Y-BALLT. (H. S. Fairhurst, Architect.)

5. *Dignity and Refinement.*—Attention to the foregoing principles ought to bring dignity in their wake, for the smallest cottage may have the dignified image and superscription of honesty stamped on its features. Good proportion and fine lines without any ornament make a harmonious composition, for, as in another art, "Das Ornament ist nicht die Melodie, sondern die Begleitung."

Nothing detracts more from the dignity of a garden than petty and trivial ornaments. Only real works of art can bear to stand alongside the works of Nature. It were better to have no ornaments at all than to have anything but the best.

A simple symmetrical arrangement contributes to the dignity of any garden, but while good balance should be preserved, the symmetry should not be precise, as where

> Grove nods at grove, each alley at its brother,
> And half the garden but reflects the other.

A certain freedom in details is necessary to secure the best results, and a hard and stiff effect should be avoided.

6. *Mystery.*—This, the most elusive quality of design, does not in any way conflict with simplicity. A certain measure of it follows the arranging of the various parts of the garden so that everything may not be apparent to the spectator at once, that he must look here and there, and at every turn find fresh beauties, new points of interest.

Some of the old gardens of Italy are full of that charm of mystery, which makes a strong appeal to the imagination, while Le Nôtre's hydraulics at Versailles largely fail to arouse any kindred feeling.

OF THE ENCLOSURE OF THE GARDEN.

The word "garden" stands for an enclosed space, and comes from the same root as "garth," or "yard," being surrounded by walls to separate it from the open fields or woods. In Chaucer's translation of the *Roman de la Rose*, he refers thus to the garden, which

> Enclosed was, and walled wele,
> With hie walles embatailed.

This essential characteristic of the garden should be frankly accepted and honestly carried out. There is no use of pretending that one's garden includes the whole countryside by having recourse to the dodges of the "landscape" school, such as sinking the enclosures in ditches. The garden in connection with a house is its enclosing frame, and no deception should be practised in connection with it. The pretence that the garden is a place of wild Nature is well met by Sir George Sitwell: "You can't hope to persuade us that Nature built the house: why insult our understanding by pretending that Nature made the garden?" The enclosure is needed for shelter for plants and for some degree of privacy, and should be treated simply, but with decorative feeling, and emphasised rather than ignored. The charm of "a garden enclosed" is its seclusion, and the feeling that the owner has a retreat, however small, beyond the bustle of the outer world, which he can call home.



FIG. 13.—TAN-Y-BALLT. (H. S. Fairhurst, architect.)

The garden will be enclosed by walls or hedges, as may be found most convenient, but around a house of some importance walls would probably be most suitable.

Hedges make a beautiful frontier, thickset round a little garden and kept neatly clipped. They may be of deciduous trees, as the hawthorn, beech, lime, or hornbeam or of evergreens, such as box, holly, yew, or privet. Some of these grow better in one locality than another. The trimming should be done on the simplest possible lines.

If the lover of wild Nature prefers the hedge for its green, restful beauty and the shelter it gives to the feathered songsters of his garden, another will prefer the stone or brick wall for the perfect screen it makes and for the surface it gives for growing all sorts of climbers. A beautiful

garden wall may be made with rough stones from the fields, built dry, and small flowering plants grown in its crevices. A strong coping, in harmony with the wall it crowns and protects, should be always provided.

One of the worst possible enclosures is the ordinary cast-iron railing. The split oak or other wooden fence is much more artistic. Wrought iron work, simple or rich, always looks well in a garden, but is expensive.

The design of the garden gate requires special consideration. It is an outpost of the house itself, and should be in perfect harmony with it. A common mistake is to have too pretentious a gateway for the house to which it leads. Whether it is a simple oaken gate, framed in a hedge sweet with the briar rose, or the massive wrought-iron gates of a Tijou, swinging on great classic piers, the garden entrance should be pleasant and inviting, holding out some indication of the welcome within.

OF THE PATHS IN THE GARDEN.

Walks and paths are a necessity which ought to be provided in a straightforward way. The "landscape" gardeners of the eighteenth century were in sore straits over the walks, which up till that time had led a visitor from one part of the garden to another in a direct and unaffected way. Kent made up his mind that Nature abhorred a straight line, and came to the conclusion that she must love "the line of beauty." So the order went out for serpentine walks. He did not see that serpentine paths were just as artificial as straight ones. When the craze for what became known as the "English Garden" crossed to the Continent, and the winding walks and other freaks of England's landscape-makers attracted attention abroad, a French writer scoffed: "Rien n'est plus facile que de dessiner un parc anglais; on n'a qu'à enivrer son jardinier, et à suivre ses traces."

In any case only straight paths should be within the immediate vicinity of the house. The walks should not be shirked as something which ought not to be in a garden. They should be accepted as part of the scheme, and made to play their part in the design of the garden. Properly laid out, the paths give beautiful vistas leading the eye to the points of interest in the garden, with their arches here and there, framing pictures of the distant landscape. The paths should be carefully proportioned to the traffic, and all necessary communication with kitchen-garden, stables, &c., conveniently arranged.

The best materials for garden walks are gravel, stone flags, or brick paving, laid in the simplest patterns. Asphalte and concrete are dry and durable, but make hard and ugly paths in a garden.

For the borders of walks, grass is perhaps the most beautiful, but it requires much attention to keep it in good order. The margins ought to be broad enough for the use of the lawn mower. Natural-faced stones make a good edging, and box is an old favourite, although blamed for harbouring some of the pests of the garden. Glazed earthenware edgings, especially the ornamental ones, are really the worst that can be used. Wood edging can only be regarded as temporary, to protect box, &c., in course of growth.

OF LAWNS.

The green sward which carpets England's gardens is her unique possession, for no country can show lawns to equal the thick velvety turf to which our climate is so favourable. Chaucer wrote of the lawn of his day being

> Ful thikke of gras, ful soft and swete,

and Bacon wrote that "Nothing is more pleasant to the Eye than Green Grass kept finely shorn."

Every garden should have as wide an extent of lawn as can be conveniently provided. The lawn gives unity and breadth to the whole composition. It should be jealously guarded from invasion by anything that would break up its surface, for the whole effect of a beautiful lawn may be taken away by a few flower-beds or specimen trees spotted over its surface.

OF FLOWER-BEDS AND PARTERRES.

Flower-beds laid out in intricate geometrical patterns, known as "knotts," were among the features of the old English formal gardens. They were enclosed in a border of box or lavender, and the effect heightened by the use of sand or coloured earths. Elaborate parterres were also used in France, the different kinds being known as *Parterres de broderie*, *Parterres de compartiment*, and *Parterres à l'anglaise*. Of such decorations as these Bacon says: "As for the making of Knots or Figures, with Divers Coloured Earths, that they may lie under the Windows of the House, on that Side which the Garden stands, they be but Toys, you may see as good sights many times in Tarts."

Rich beds of flowers are most appropriately arranged on the garden terraces next the house, but they ought to be laid out simply, and enclosed by straight lines. Elaborate geometrical designs are quite out of place. They are apt to look grotesque rather than ornamental and help to destroy the dignity of a garden. All attempts to produce representations of other things on a flat surface ought to be rejected. The trivialities of what is known as carpet-bedding are as ridiculous in a garden as the vagaries of "verdant sculpture." It is well that the fashion, for it was nothing better, has to a great extent passed away. The flowers themselves, simply set in masses of colour, harmoniously grouped, form the most beautiful decoration. The herbaceous border of the present-day garden is really a revival, and a welcome one, of the old and simple way of disposing flowers, and is much to be preferred to the overwrought patterns of a time when art had been almost driven out of the garden. The simpler the forms in which these beds are laid out the better.

OF KITCHEN GARDENS AND ORCHARDS.

The kitchen garden should be placed conveniently for the kitchen service, and not far from the stables, &c. It should have a good exposure, so as to get as much sunlight as possible. Walls form the best enclosure as they give the best shelter and their surface is available for training fruit trees. Hedges are of no use for this purpose, and their roots draw all the nourishment from the soil around them. The interior of the wall should be quite flat so as not to interfere with the trees on its inner face, all buttresses or breaks being formed on the outside. The wall should have a cope with a good projection, and fixtures for training wires built in during its erection. A good water supply is necessary, and a tank, for exposing water in the open air, might be made a feature in the garden.

The kitchen garden should be treated quite plainly and unpretentiously, but a feature might be made of the gateway, giving a long vista up the central path. Some visitors will wish to see the homely beauties of this garden as well as the splendours of the flower-garden. We find Addison writing in 1712, in one of his essays in the *Spectator*:—

> Besides the wholesome luxury which that Place abounds with, I have always thought a Kitchen-garden a more pleasant sight than the finest Orangerie or artificial Green-house. I love to see everything in its Perfection and am more pleased to survey my Rows of Colworts and Cabbages, with a thousand nameless Pot-herbs, springing up in their full Fragrancy and Verdure, than to see the tender Plants of Foreign Countries kept alive by artificial Heats, or withering in an Air and Soil, that are not adapted to them.

The walks of the kitchen-garden may be decorated with beds of flowers useful for house decoration, it not being desirable to denude the flower-garden for this purpose.

Within the enclosure such accessories will have to be provided as greenhouse, garden frames, root, seed, and fruit stores, potting shed, &c.

In spring and autumn, the orchard, however small, is a beautiful as well as useful part of the garden. It must be well sheltered by belts of trees from the cold winds. In some old-fashioned orchards the grass is allowed to grow, and drifts of daffodils gild the green carpet here and there, and when these have faded, many old flowers appear that are rarely to be seen now, for they have gone out of fashion, as poor John Clare wrote :—

> And where the marjoram once, and sage and rue,
> And balm and mint, with curled-leaf parsley grew,
> And double marigolds, and silver thyme,
> And pumpkins 'neath the window used to climb ;
> And where I often, when a child, for hours
> Tried through the pales to get the tempting flowers :
> As lady's laces, everlasting peas,
> True love lies bleeding, with the hearts at ease ;
> And golden rods, and tansy running high,
> That o'er the pale top smiled on passer-by ;
> Flowers in my time which every one would praise,
> Though thrown like weeds from gardens now-a-days.

OF WATER IN THE GARDEN.

Reference has already been made to the use of water in the gardens of other days, and in this the garden designer of to-day will do well to study carefully the lessons of the past.

No garden can reach the highest degree of beauty without water, whether a running stream, a mirror-like pool, or a bubbling fountain.

In grounds of a formal character, the artificial pond, with its water-lilies and the reflections on its glassy surface, is doubtless the form in which water may be used for the decoration of the garden. A rectangular or circular basin will impart both dignity and grace to the composition. The course of a running stream would probably be best included in the " Wild Garden," for however formally the garden around the house may be arranged it is well to have, if possible, a few acres of wooded ground beyond the bounds of the garden, where the wild plants and flowers of the locality may be grown and tended, not laid out in any way, but, as Bacon says, " framed, as much as may be, to a Natural Wildness."

The pond would thus have a constant supply, and the overflow would run into the stream lower down. The water would never become stagnant, and a constructed pond may be cleaned out occasionally, which cannot be done otherwise.

The kerb of the pond should be as low and as simple as possible. A balustrade is not at all advisable. Such a pond is much more satisfactory than any attempt to make an artificial pond look as if it were a naturally formed sheet of water.

Fountains have been in use ever since man commenced to lay out gardens, and, indeed, especially in warm sunny weather, " they are a great Beauty and Refreshment." The charm of the fountain is doubtless to be traced back to the feelings that man entertained in early days to the natural spring, " the fountain of living waters." The rush of water, like a living thing, from the bowels of the earth, spreading its refreshing spray over the parched earth, is always an attractive sight. Against the green background of a garden it has a most beautiful effect.

The finest examples of fountains are doubtless those in the gardens laid out during the Italian Renaissance. The grounds of Versailles as laid out by Le Nôtre have the most wonderful series of fountains to be seen anywhere, but they are on too great a scale for the water available,

and now present rather a melancholy spectacle, spite of the beauty of the sculpture from the hands of Lebrun, Regnaudin, Marsy, and others, with which they are so lavishly adorned.

It is but rarely that sculpture can be introduced in connection with the fountains of a domestic garden, but it should be laid down as a principle of their design that the figures should

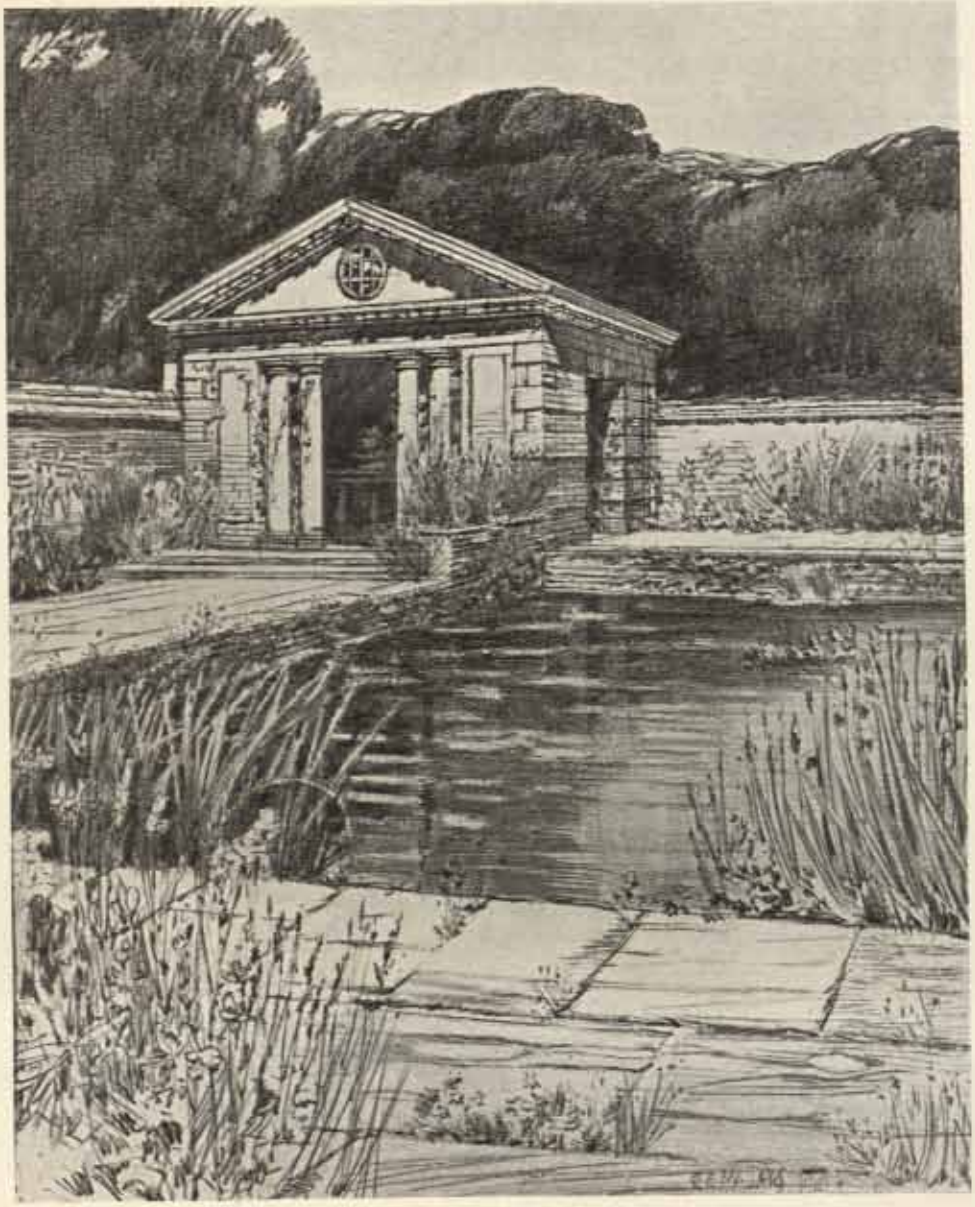


FIG. 14.—GARDEN SHELTER AND LILY POND.
From a drawing kindly lent by the architect, Mr. C. E. Mallows.

be subsidiary to the fountain, and not the fountain to the sculpture. In most gardens a single jet rising from a simple gracefully designed standard will be more charming than an elaborate and showy fountain too ostentatious for its surroundings. The fountain should be put in a fairly sheltered place, as the wind may blow the water where it may be undesirable.

OF GARDEN-HOUSES.

Every garden, unless it be very small, should have a garden house. The term is meant to refer to something quite different from the ordinary "summer house," a flimsy structure of wood, often of a "rustic" character, highly varnished, and altogether out of harmony with plants, flowers, or anything beautiful. It is often damp, partly decayed, overgrown with vegetation, and overrun with insects.

Properly built garden-houses were a feature in all large gardens before the days of landscape



FIG. 15.—MONTACUTE, SOMERSHIRE: THE GARDEN HOUSE AND PAVILION.
Reproduced by permission from Mr. H. Inigo Triggs' *Formal Gardens in England and Scotland* (Batsford, 1902).

gardening, when all such traces of civilisation had to disappear. Two beautiful examples are still to be seen at Montacute. They were frequently quite well fitted up, and formed delightful retreats.

The garden-house is a necessity when the garden is really used by the occupants of the house and not kept for mere show. The garden-lover will wish to have a place in it where he can retire for rest, study or recreation, sheltered from the elements, and yet with the garden air all around. If it is out of sight of the house or at some distance, it may be built of a rougher style of masonry, and a thatched roof will give it a snug appearance. It should be set so as to give as beautiful views of the landscape beyond as the garden can command. It may be furnished with easy chairs and hammocks, and such other fittings as will readily suggest themselves.

OF PERGOLAS AND ARBOURS.

The pergola had its origin in Italy, the garden of Europe. The word is Italian and belonged originally to a variety of grape grown in Italy. It was used ultimately to include also the arbour upon which the vine was grown, and both came to be so much in vogue that the word was applied to any covered way formed with climbing plants of any kind. The pergola formed a most important part of the garden decorations of Italy, designed during and since the Renaissance. There it is a beautiful structure, generally built with stone pillars, crowned with wooden beams. Creepers of all sorts are trained up the columns and spread over the whole of the pergola, which thus forms a deliciously shaded corridor in the open air.



FIG. 16.—WYCH CROSS PLACE. (Thomas H. Mawson).

The pergola has come into use in this country during recent years, although it really belongs to warmer climates than that of England. It should only be used to serve some definite end, leading from one part of the garden to another. It makes a beautiful passage-way to the garden-house or the rose garden. In construction and design it should be quite simple and light. In this country trellis-work is frequently used for the construction of pergolas, so that during winter it may present a better appearance than it would otherwise do.

The arbour is closely related to the pergola, and although somewhat like the "summer-house," is much lighter, being generally of very open lattice-work.

Pergolas and arbours should be covered with flowering creepers rather than ivy, as the latter is apt to grow much too thickly. An arbour of climbing roses makes a charming shelter. Treillage and trellis-work are most suitable for forming archways over walks and any divisions or screens which it may be found desirable to erect in the garden. The French style, on square rather than diamond lines, is much the better.

All the wood used in making these structures, being exposed to the weather, should be of oak or teak.

OF SEATS IN THE GARDEN.

At least one seat should be found in the smallest garden. Seats have formed part of the furniture of the garden at all times, from the simple stool on which the Oriental sat, under his vine or fig tree, ages ago, down to the semi-circular exedra in the gardens of Italy, and to Spenser's day, when he wrote in *The Faerie Queene* :—

> And all without were walkes and alleyes dight,
> With divers trees enrang'd in even rankes ;
> And here and there were pleasant arbors pight,
> And shadie seates and sundry flowering bankes
> To sit and rest the walkers' wearie shankes.

Seats of marble, richly decorated, were among the ornaments of Roman and Italian gardens, but stone seats are not suitable for a cold and damp climate, and under sunless skies they are apt to look chilly and uninviting. In England they are sometimes provided with a wooden seat or lattice, but probably the best course is to have the seats wholly made of wood. Good English oak, left to colour naturally, or deal painted green, are the best materials for the making of seats, which should be as simple in design as possible. The garden should not, on any account, be disfigured by seats made of the so-called "rustic work," or of "ornamental" cast-iron with varnished pitch pine slats.

The size and style of the seats may vary from the simple detached seat to a large semi-circular one set where it will form a centre of interest in some part of the garden ; it might be partly enclosed and covered by a light trellis roof if shade is specially desired. A circular seat may be carried all round a tree, and seats may also be placed in niches formed in the terrace walls. They should always be placed to command a view of some interest or beauty, and shelter and shade should be kept in mind. The comfort and durability of the seats will be greatly increased if they are set on brick or stone platforms raised a few inches above the surrounding grass, and the appearance of a seat is much enhanced by a background of shrubbery.

OF SUN-DIALS.

Gervase Markham, one of the first English writers on garden craft, wrote in 1615, on the desirability of having as the centre-piece of one of the four quarters into which he divided his ideal garden, "either a conduit of some anticke fashion, a standard of some unusuall devise, or else some Dyall or other Pyramid that may grace and beautifie the garden."

Although scarcely ever used for the reading of time in these days, a dial, on which the sun points to the passing hour, may be fittingly set up in the garden. The old-world associations which linger around the sun-dial make it peculiarly suitable in a country garden.

In one of his essays, "The Old Benchers of the Inner Temple," Charles Lamb, musing on sun-dials writes :—

What a dead thing is a clock, with its ponderous embowelments of lead and brass, its pert or solemn dulness of communication, compared with the simple altar-like structure and silent heart-language of the old dial. It stood as the garden god of Christian gardens. Why is it almost everywhere vanished? If its business use were suspended by more elaborate inventions, its moral uses, its beauty, might have pleaded for its continuance. It spoke of moderate labours, of pleasures not protracted after sunset, of temperance and good hours. It was the primitive clock, the horloge of the first world. Adam could scarce have missed it in Paradise. It was the measure appropriate for sweet plants and flowers to spring by, for the birds to apportion their silver warblings by, for flocks to pasture, and be led to fold by. The shepherd carved it out quaintly in the sun, and turning philosopher by the very occupation, provided it with mottoes more touching than tombstones.

In placing the sun-dial in the garden, care must be taken not to put it in the midst of incongruous surroundings, such as buildings or garden furniture of pronounced modernity. Especially is it out of place in a town garden, within sight of a crowded street. It is best set in a quiet and sequestered part of the garden, with no more of man's handiwork in view than a seat, inviting rest, reading, or thought.

I stand amid ye summer flowers,
To tell ye passage of ye houres.
When winter steals ye flowers away,
I tell ye passinge of their day.
O man, whose flesh is but as grasse,
Like summer flowers, thy life shall passe.
Whyles tyme is thine laye up in store,
And thou shalt live forevermore. (Brougham Hall, 1660.)

At the same time, the plot in the centre of which it stands should be fully exposed to the sun at all times of the day, even although the dial finds a place in the modern garden as an ornament and a link with bygone days rather than for its primary purpose.

Stone is the most suitable material for the pedestal. Cast-iron, from an æsthetic point of view, is out of court. Wood does not have the character of permanence which we associate with the sun-dial. It is liable to decay if it is not painted or otherwise treated, and the only colour that suits a sun-dial is the stain of Time.

OF SCULPTURE AND ORNAMENTS IN THE GARDEN.

The use of sculptured figures and other ornaments in the garden was much more common in Italy and France during the Renaissance than in England, where greater restraint has always been shown in the use of such decorations.

There is no doubt that the sculpture in many of the Italian gardens adds a charm to their beauty. It introduces a human note, the necessity for which is felt in these large terraced gardens, with their great masses of dark green yew and ilex. The marble figures give a high light to the colour scheme, which otherwise would be overpowering, while the dark clipped foliage gives the sculpture a background which enhances its beauty.

It is a mistake, however, on æsthetic as well as practical grounds, to have marble statuary outside, in the climate of England, where marble can rarely be seen in its full beauty. Apart from its discoloration and decay in our atmosphere, figures in that material look very much out of place in winter. When snow covers the landscape the poor thinly clad marble statues look as if they ought to be taken in from the cold!

Other stone may be used, native to the country, which is much more suitable than marble, but lead or bronze, especially the former, are much to be preferred. The lead weathers to a beautiful grey, which harmonises much better than marble with the light and colours of an English garden. Some fine old examples of such statuary are to be seen at Melbourne and Hardwick Halls.

Sculpture is out of place except in a rich and highly wrought garden scheme of strong architectural quality, wedded to a building with some classic grace, and even then it should be used with great reserve. A figure should only be used to fill up a space which otherwise would be felt to be a blank. It may also be used to emphasise and give importance to a special part of the garden. Sculpture must, however, be of absolutely the first quality. It is much better to have one really fine figure exquisitely placed and in scale with the surroundings than half-a-dozen indifferent ones scattered here and there in an aimless way. Garden statuary should not be of a serious or tragic character, but should rather be of a playful mood. The happiest pieces of old garden sculpture are the *amorini*, laughing, running, and tumbling in the joy of young life.

If the funds available do not permit of sculpture of the highest quality then it is best to dispense with its use altogether. Bacon gives it as his opinion that such adornments are for the gardens of " great Princes " only, and are by no means essential to the garden. These may use " Statues and such things, for State and Magnificence, but they add nothing to the true pleasure of a Garden."

Vases were also used as ornaments in some of the old English gardens. Beautiful examples in lead may be seen at Hampton Court, Wrest and Melbourne Hall. They ought not to be placed on an open lawn, where they are frequently to be seen, but set in distinct relation with the architectural accessories of the garden, on terrace walls, or as terminals to piers. They give the opportunity of breaking the monotony of masonry with the colours of leaf and flower.

OF GARDEN COLOUR.

In the colour scheme of the garden little success is likely to be attained without the free use of those great masses of green foliage which alone give breadth, depth, and body to the colours of a garden. It may be green of varying shades to avoid monotony, but nevertheless there must be plenty of green. Fancy-coloured trees and shrubs require to be introduced with the greatest caution,

> For green is to the eye, what to the ear
> Is harmony, or to the smell the rose.

So Nature's greatest, most restful colour must be used freely and laid on with a broad brush. There is no foil for the pageant of flowers like the dark green background given by such trees as the yew, holly, and hornbeam.

The masonry of the house itself and of its terrace walls yields a beautiful contrast to the delicate tints of the leaves and flowers of climbing plants. The colours of both leaves and flowers have to be considered in relation to the colour of the materials of the house—grey, red, brown, or otherwise, as the case may be.

The artistic massing and grouping of flowers is a most fascinating study. To ensure a proper succession of harmonious colouring throughout the floral year requires skill and forethought, but the procession of the flowers of spring, summer, and autumn, if well marshalled, is a sight worth scheming for. Care must be taken to avoid the hot, raw colours which many of the florist-made flowers take on. More of the herbaceous flowers ought to be cultivated, and the sweet old flowers that are meantime superseded by the " floral fireworks " which make a transient blaze and then disappear for ever.

The artist will not need to be told to keep the blue flowers from clashing with the scarlet ones, nor will he run in his bright yellows where they produce discord to the eye. He will use white flowers often to frame his most vivid colours. Beds of flowers are frequently to be seen which are simply a turgid mosaic of crude, harsh colours.

Care should be taken in painting the woodwork of accessories in the garden not to pitch the colours in too high a key, thus killing the natural colours. Most of the woodwork should be a soft green, which does not compete with the colour of the trees, nor Milton's " smooth enamelled green " upon the lawn. For the same reason, staring white woodwork should also be avoided. It should be toned down to a light grey.

EPILOGUE.

John Evelyn wrote to one of his contemporaries : " I beseech you, forget not to informe yourselfe as diligently as may be, in things that belong to gardening." The architects of to-day, and especially the younger ones, would do well to take Evelyn's advice to themselves. The architect takes a short-sighted view of his art who thinks that when he has finished the building itself his work is done. From the very inception of the design he should have before him the treatment of the surroundings of his building, and whatever its purpose or character, he ought to regard it as his duty and privilege to design a harmonious setting for it. Where possible, he will enlist Nature's aid to grace his art and fit Nature's work around that of man's hands so that there may be no conflict, but that each may enhance the effect of the other. As the great dramatist has put it :—

> There is an art that doth mend nature,
> Change it rather,
> But the art itself is nature.

The practice of his art will be bettered by his getting into closer touch with Nature, with the principles on which she works and with the beauty of form and colour that characterises all her works. While he seeks to make her his ally he will get nearer to her, nearer to " the breath of flowers," to the music of birds and the murmur of running water, and as he does so his art is sure to gain in truth, in power, in beauty. He will seek to realise the responsibility of the art that raises structures which, so long as they stand, are either music or discord to all who see them, and are at peace or at war with Nature around them. He may learn, too, the dignity of his labours in designing the environment of house and home from such a poet, a seer and interpreter of Nature as Wordsworth, in these words, which may fittingly close our study :—

> Laying out grounds, as it is called, may be considered as a liberal art, in some sort like poetry and painting; and its object, like that of all the liberal arts is, or ought to be, to move the affections under the control of good sense, . . . If this be so when we are merely putting together words or colours, how much more ought the feeling to prevail when we are in the midst of the realities of things; of the beauty and harmony, of the joy and happiness of living creatures; of men and children, of birds and beasts, of hills and streams, and trees and flowers; with the changes of night and day, evening and morning, summer and winter; and all their unwearied actions and energies.



TOWN PLANNING.

PAPERS COLLECTED BY THE R.I.B.A. TOWN PLANNING COMMITTEE.

XIX. THE HOUSING AND TOWN PLANNING ACT: NOTES ON POINTS OF SPECIAL INTEREST TO ARCHITECTS

By RAYMOND UNWIN.

PART I.—The first portion of the Act, Sections 1–53, dealing with housing, refers chiefly to the proceedings likely to be taken by Local Authorities, and consists mainly of amendments to the Housing of the Working Classes Acts 1890–1909, which have the general effect of giving greater facilities in the provision of housing accommodation in districts both urban and rural. This part of the Act is somewhat complicated owing to the fact that it is chiefly what is known as legislation by reference to other Acts, and it would need to be studied separately by those who are interested in the question of Municipal Housing. There are, however, one or two provisions in this part of the Act which may prove useful to architects in connection with new development schemes—for example :—

Under Section 4.—The Public Works Loan Commissioners are authorised to lend to a Public Utility Society up to two-thirds of the value of the property in place of one moiety as previously; and a Public Utility Society is defined as a Society registered under the Industrial and Provident Societies Act 1893, or any amendment thereof, the rules whereof prohibit the payment of any interest or dividend at a rate exceeding 5 per cent.

Under Section 6.—The Local Authority may lay out and construct public streets or roads on any land acquired or appropriated by them for the purposes of Part III. of the Housing of the Working Classes Act 1890, or they may contribute towards the cost of the laying out and construction of any streets or roads on any such land by other persons on the condition that those streets or roads are to be dedicated to the public. Thus they are enabled to facilitate the development of land for housing purposes by Societies of Public Utility or other bodies.

Section 14 should be carefully studied by any architects interested in the letting of small house property, as by it the onus is thrown upon the owner of maintaining the house in all respects reasonably fit for human habitation during the whole term of the tenancy. This applies to all houses the annual rents of which in London do not exceed £40, in boroughs having a population of 50,000 or upwards do not exceed £26, and in the case of houses situated elsewhere, do not exceed £16.

Under Section 17 the Act provides that a room habitually used as a sleeping place, the surface of the floor of which is more than 3 feet below the surface of the part of the street adjoining or nearest to the room, shall be deemed to be a dwelling-house so dangerous or injurious to health as to be unfit for habitation unless the room is at least 7 feet in height from floor to ceiling, unless it complies with such regulations as it is provided the Local Authority, with the approval of the Local Government Board, shall make for such rooms.

Under Section 43 the Act prohibits the building of back-to-back houses, but provides certain exceptions in the case of houses containing several tenements where the Medical Officer of Health for the district certifies that effective ventilation is secured.

Under Section 44 power is given to the Local Government Board to revoke by-laws or to make new by-laws where they are satisfied by local inquiry or otherwise that the erection of dwellings for the working classes is being unreasonably impeded in consequence of any local by-laws. Architects may be able to make use of this section when hampered in building cottages by objectionable by-laws.

PART II. of the Act deals with the subject of Town Planning. It is much simpler in form than Part I., and consists of only a few pages, which should be read by all architects taking any interest in the subject, as any short summary of such an Act must necessarily be very incomplete. It may, however, be useful to give such a short summary, and afterwards to draw special attention to parts of the Act of particular interest to architects.

The opening section, No. 54, defines shortly the scope of the Act:

> A town planning scheme may be made in accordance with the provisions of this Part of this Act as respects any land which is in course of development or appears likely to be used for building purposes, with the general object of securing proper sanitary conditions, amenity, and convenience in connexion with the laying out and use of the land, and of any neighbouring lands.

The clauses which give effect to this general section provide that a Local Authority (which means the Council of any borough or urban or rural district, and in London the London County Council, or a joint body composed of two or more Councils in the case where a Town Planning scheme affects land situated in more than one Local Government area) having satisfied the Local Government Board that there is a *prima facie* case for it, may prepare a Town Planning scheme for the land in their area and for neighbouring lands which should be included in the scheme. In addition to this, the Act provides that such Local Authority may adopt a scheme prepared by one or more owners of land within the area, and that if so adopted such privately prepared scheme will become a Town Planning scheme and have effect as if embodied in the Act.

The form of procedure gives ample opportunity for public consideration of the scheme, for the hear-

ing of objections and suggestions. Provisions are made for the necessary powers to enforce schemes, and the Local Government Board have power to compel Local Authorities to make or adopt schemes.

Provision is made for compensation in respect to property injuriously affected and for the recovery by the Local Authority of half the increased value of any property the value of which is improved by the Town Planning scheme. The Local Government Board appoint arbitrators who are the final referees in all disputes as to compensation. The Local Authority is empowered to purchase land for the purpose of the scheme.

Having shortly summarised the provisions of this part of the Act, I will deal more in detail and separately with two aspects of the matter: (A) with what must interest all architects, namely their power to influence the preparation of town planning schemes by the Local Authority for their district; (B) with the powers of individual owners or groups of owners of land to prepare and submit town planning schemes for their estates.

A. Deserving of special notice is the introduction of the word "amenity" into the first general clause of this part of the Act, and while much must depend upon the view taken by the Local Government Board, it appears obviously to be the intention that in the future development of land whether for the purpose of dwellings, factories or railways, provision should be made in planning the scheme for parks and other open spaces and for something in the general treatment which shall go beyond the mere utilities and conveniences of the scheme. The introduction of this word would clearly cover some consideration of the architectural effect likely to result from the plan.

The sections of the Act giving opportunities to architects and others to influence the proposed scheme are the following:—

Section 56 provides that the Local Government Board may make regulations defining the procedure to be adopted with respect to applications for permission to prepare or adopt a town planning scheme, the preparation of the scheme, and for obtaining the approval of the Local Government Board to such a scheme and in respect to any inquiries, reports, notices, &c., in connection with the preparation of the scheme, and by sub-section 2, such regulations must include provision

(*a*) For securing co-operation on the part of the Local Authority with the owners and *other persons interested in the land* proposed to be included in the scheme, at every stage of the proceedings, by means of conferences and such other means as may be provided by the Regulations.

(*b*) For giving the necessary notices.

(*c*) For dealing with matters mentioned in the fifth schedule of this Act. This schedule defines in general terms the procedure to be followed. Such procedure is divided into three separate stages:—

1. *The procedure necessary in connection with an application for authority to prepare or adopt a scheme which includes the submission of plans and estimates and the publication of notices.*—The Regulations defining the procedure have just been issued, and in them the following are the provisions made at this stage for the consideration of suggestions and criticisms by owners, architects or others interested.

Under Article I. the Local Authority is required:

(*a*) To give two months' notice to all owners and occupiers of land likely to be affected by the scheme, and to publicly advertise their intention to apply for permission to prepare a scheme.

(*b*) They are also to deposit at some convenient place for purposes of inspection and to afford to any person interested, without payment, at all reasonable hours, opportunity of inspecting a map, on the 25-inch Ordnance scale, of the land proposed to be included in the scheme, and to arrange for giving any necessary explanation of the map.

Under Article III. the Local Authority before making an application for permission to prepare a scheme shall consider any objections or representations made to them in writing in reference to the proposed scheme, whether by owners or other persons interested in the land proposed to be included in the scheme or any adjacent lands affected by the scheme, and the Local Authority shall further endeavour by conference with such owners or other persons and by any other means available to secure their co-operation in promoting the scheme. They are further required to arrange for at least one meeting being held at which all such owners or persons as aforesaid shall be entitled to attend or be represented for the purpose of considering the proposed scheme, and notice of such meeting is to be served on all such owners or persons. A copy of all objections which have not been removed or withdrawn must be forwarded by the Local Authority to the Local Government Board as part of the information required when permission to prepare a scheme is applied for.

2. *The procedure during or after the preparation or adoption and before the approval of the scheme by the Local Government Board.*—At this stage, in addition to providing for submitting the necessary particulars to the Local Government Board and for giving the necessary notices, the following very important provision is included in the schedule under the sub-section (*c*), namely: "Hearing of objections and representations by persons affected, *including persons representing architectural or archæological societies or otherwise interested in the amenity of the proposed scheme.*" It should be noted that in this schedule the words used are "*persons affected*" and that representatives of architectural or archæological societies or persons otherwise interested in the amenity of the proposed scheme are expressly included among

persons affected. In several places in the Act, as for instance, section 54 (4) and (6), section 56 (2) (*a*), as also in the fourth schedule, section 55 (18), the references are to persons *interested*. Whether there will be considered to be any difference between persons *affected* and persons *interested* may be a nice legal point, but in several cases the word "affected" is used with reference to the property, as, for instance, in the first line of section 58—"Any person whose property is injuriously *affected*"—so that, on the whole, it would seem probable that the inclusion among persons affected of representatives of architectural and archæological societies or otherwise would imply that they are also persons interested and that they would therefore have opportunities to appear wherever it is provided that persons interested shall be heard in connection with the Act. In this way considerable influence may undoubtedly be exercised by local architectural and other societies, not only to secure the protection of the existing amenities of the town, whether natural, historical or of whatever character, but also by criticising the proposed town plan from the point of view of its probable architectural effect and by making suggestions for improvement.

It is further provided in Clause 4 of this schedule that Regulations are to be made defining the duty, at any stage, of the Local Authority to publish or deposit for inspection any proposed scheme and to give information to persons affected by any such scheme. Here, clearly, all who are defined above as persons affected are entitled to receive full information of any proposed scheme.

Under Article XII. of the Procedure Regulations :

(*a*) At this stage in the proceedings the Local Authority is required to serve notice upon the owners and occupiers that such authority has been given and exhibit a copy of the order giving the necessary authority.

(*c*) The notices and advertisements are to state that the Local Authority propose to prepare or adopt a scheme and that any person interested or affected desiring to be heard in reference to such proposal, including any persons representing architectural or archæological societies or otherwise interested in the amenity of the proposed scheme, should give notice in writing to the Clerk of the Local Authority within twenty-one days from the date of the notice or advertisement and

(*d*) The Local Authority are to afford to such persons an opportunity of inspecting the order and to give to them any necessary explanation or information in regard thereto.

Under Article XIII. the Local Authority are to carefully consider all objections and representations made to them in writing by such persons or societies.

Under Article XIV. the Local Authority, when they have fully considered their proposals, are to have a draft scheme printed embodying them, including a map on the 25-inch Ordnance scale giving full particulars of the scheme.

Under Article XVI. :

(*a*) The Local Authority must serve notices and advertise the completion of the draft scheme and

(*b*) must deposit at a convenient place for the purpose of inspection for a period of at least twenty-one days the draft scheme and maps, and these are to be open for inspection without fee at all reasonable hours, and explanation or information with reference to them is to be given to any person affected desiring it.

(*c*) The notices are to state that the Local Authority will consider objections or representations made to them in writing by persons affected, and by *Article XVII.* it is provided that the same consideration and objection and the same provision for a public meeting to discuss them shall apply as is described in *Article III.* for the first stage of the proceedings.

Under Article XX. :

(*e*) A copy of all objections so far as they shall not have been removed or withdrawn must accompany the scheme when it is forwarded to the Local Government Board for approval.

Under Article XXIII. notice of submission of such scheme for approval must be given and advertised, and such notice shall state that a copy of the scheme as submitted to the Board may be inspected as above.

Under Article XXIV. :

(*a*) It is stated that in case the Local Government Board proposes to make any modifications or attach any conditions to the scheme submitted for its approval, the Local Authority must serve a copy of the draft order upon owners and occupiers of the land included in the scheme, with a notice that objections or representations in regard to such modifications or conditions should be made in writing to the Local Government Board, and

(*b*) Similar notice is to be given by advertisement in the district.

In addition to these opportunities provided for suggestions or criticisms, *Section* 54 provides that before a town planning scheme is approved by the Local Government Board, notices of their intention must be published in the *London* or *Edinburgh Gazette*, and if within twenty-one days from the date of such publication *any person or authority interested* objects in the prescribed manner, the draft of the order shall be laid before each House of Parliament for a period of not less than thirty days during the Session, and will only become operative if neither House presents an address to His Majesty against the draft.

Under Article XXVI. Finally it is stated that when notice of the intention of the Local Government Board to approve the scheme has been published, any person or authority interested in the scheme and deciding to formally object to the scheme shall make his objection to the Local Government Board by letter stating the claims of the objector to make the objection and the grounds of his objection.

3. The third stage deals with the procedure in connection with the carrying out of the scheme when approved and settled. The Regulations dealing with this have not yet been issued.

Section 54 (6) gives power to the Local Government Board to vary or revoke an existing town planning scheme by a subsequent scheme prepared or adopted, on the application of the responsible authority or of any other person appearing to them to be interested.

The opportunities which the Act affords for persons affected to offer suggestions, criticism or opposition in connection with any town planning scheme apply just as fully to schemes prepared by individual owners and put forward for adoption by the Local Authority, and once put forward all the powers and responsibilities of the Local Authority and the Local Government Board apply to such schemes.

The extent of the area to be included in the scheme is a matter upon which architects may well give useful suggestions. The land to be included is not confined to that within the area of the Local Authority preparing the scheme, but may include land within the neighbourhood of that area. Special power is given to the Local Government Board to include a piece of land already built upon, or a piece of land not likely to be used for building purposes where so situated with respect to any land likely to be used for building purposes that it should be included in any town planning scheme—see Section 54 (3); while Section 54 (7) defines "land likely to be used for building purposes" as including land likely to be used as or for the purpose of providing open spaces, roads, streets, parks, pleasure or recreation grounds, or for the purpose of executing any work upon or under the land incidental to a town planning scheme, whether in the nature of a building work or not.

Architects also will be specially interested in the matters referred to in sub-section (5) of the fifth schedule, a most important sub-section which being at the end of the schedule dealing with the details of the procedure is likely to be overlooked. It reads as follows:—

> The details to be specified in plans, including, wherever the circumstances so require, the restrictions on the number of buildings which may be erected on each acre, and the height and character of those buildings.

It will be seen that this sub-section refers to perhaps the most important powers in the Act.

And, under the Procedure Regulations, *Article XIV.*, it is provided that on the maps which are to be prepared in connection with the scheme there will be shown and clearly indicated by suitable colouring the land proposed to be allocated

> for use as open spaces (*a*) private or (*b*) public; and land to be used for any other purposes including, for example, buildings for manufacturing purposes or buildings of a special character in reference either to the purposes to which they are to be applied or to their height or otherwise, indicating any restrictions proposed as to the number of buildings which may be erected on any portion of land or each acre in any portion of land.

In *Section* 55 (1) it is provided that the Local Government Board may prescribe sets of general provisions adapted to particular areas for carrying out the general objects of town planning schemes in addition to matters actually shown on the plan. Such matters are set out in Schedule IV. and include the following which may be mentioned:—

1. Streets, roads and other ways, the stopping up or diversion of existing highways.
2. Buildings, structures and erections.
3. Open spaces, private and public.
4. The preservation of objects of historical interest or natural beauty.
12. Power of the responsible authority to remove, alter or demolish any obstructive work.
13. Power of the responsible authority to make agreements with owners, and of owners to make agreements with one another.
15. The application with the necessary modifications and adaptations of statutory enactments. (This seems to refer to the application of existing laws and by-laws to the scheme and the making of any modifications and adaptations of such laws and by-laws.)
17. Limitation of time for operation of scheme.
18. The co-operation of the responsible authority with the owners of land included in the scheme or *other persons* interested by means of conferences, &c.

The other items in the schedule relate chiefly to engineering matters. Although it is not the intention of the Local Government Board immediately to issue these provisions, the schedule is important as showing what matters may be dealt with in a scheme.

In addition to this, *Section* 55 (2) gives power to suspend so far as necessary for the proper carrying out of the scheme any statutory enactments, by-laws, regulations or other provisions under whatever authority made, which are in operation in the area included in the scheme. Architects would be specially interested in suggesting variations of local by-laws and Acts which have been proved to affect injuriously the proper development of estates from the point of view either of economy or of architectural effect, and may use this clause to some extent as a means of adapting by-laws to the varying needs of central, intermediate and quite suburban areas.

Under Section 58 it is provided that any person whose property is injuriously affected by the making of a town planning scheme if he makes a claim for the purpose within the time limited by the scheme, not being less than three months after the date of its approval, shall be entitled to obtain compensation from the responsible authority.

Sub-section 2.—Compensation cannot be obtained on account of any building erected, contract made or work done with respect to land included in

the scheme after the time at which the application for authority to prepare the scheme was made, or such other time as the Local Government Board may fix. It is important for architects and others engaged in building to take note of the date when such application is made, as any building operations commenced after that date which are liable to clash with the town planning scheme will not be the subject of compensation should the work done have to be removed or altered, except so far as the work done between the date of the application for permission to prepare a scheme and the date of the approval of the scheme is exclusively for the purpose of finishing a building begun or for carrying out a contract entered into before the application to prepare a scheme was made.

In order that building operations may not be suspended during this time, which must run into months and perhaps years, during which a town planning scheme is being prepared and approval of it obtained, it is probable that arrangements can be made by which the Local Authorities will be able to give permission for works to go forward on lines approved by them and that such permission will entitle the owner to compensation should these works eventually be interfered with by the town planning scheme. There is, however, no express provision to this effect in the Act beyond a general power and encouragement to make agreements with owners.

Sub-section 3.—It should be generally understood also that where, by the making of a town planning scheme, any property is increased in value, the responsible authority will be entitled to recover half of the amount of such increased value if they make a claim for the purpose within the time limited by the scheme, which time shall not be less than three months after the date when the scheme shall be approved. What will be the meaning attached to the words "where, by the making of any town planning scheme, any property is increased in value" is at present uncertain, and apparently this must be eventually settled by the Courts of Law, but in the covering letter sent out by the Local Government Board with the Procedure Regulations there occurs the following very important paragraph dealing with this matter:—

"In regard to the provisions of section 58 abovementioned the Board are aware that questions have arisen as to the meaning to be attached to the words 'by the making of any (*or* a) town planning scheme' in sub-sections (1) and (3) of the section. The Board have no authority to determine the interpretation to be placed upon provisions in the Act, but they are advised that, in giving effect to the section, no loss in value or gain in value of the property affected which is not due solely to the making of the scheme can be taken into account. There will no doubt be exceptional cases, but as a general rule the loss or gain in value would seem to depend upon a comparison of the full value of the property immediately prior to and irrespective of the making of the scheme with the full value of the property immediately after the making of the scheme, regard being had to the provisions of section 59 of the Act."

It should be noted also that both the liability of the responsible Authority for compensation in respect of property injured and the right of the Local Authority to claim half the increased value, apply equally in the case of schemes prepared by the owners of land and adopted by the Local Authority as in the case of schemes prepared by the Local Authority.

With reference to compensation, there are various limitations to the liability of the Local Authority to compensate for injuries. These are dealt with under *Section* 59. In *Sub-section* (1) it is provided that no compensation shall be paid in respect of any provision in a town planning scheme which would have been enforceable if it had been contained in by-laws made by the Local Authority; anything which may legally be the subject of a by-law made by the Local Authority can therefore be included in a town planning scheme without becoming the subject of compensation.

Sub-section (2).—Compensation cannot be claimed on account of provisions inserted in a town planning scheme which, with a view to securing the amenity of the area included in the scheme, or any part thereof, prescribe the space about buildings or limit the number of buildings to be erected or prescribe the height or character of buildings, and which the Local Government Board consider reasonable for the purpose, having regard to the nature and situation of the land affected by the provisions.

It must not be taken, however, that the Local Government Board consider all such provisions reasonable without compensation because they appear in an approved town planning scheme, for the Local Government Board may agree with a Local Authority that some provision is worth the compensation which may be involved. It is, however, to be hoped for the sake of clearness that the Local Government Board, when approving the scheme, will indicate which, if any, of the provisions it considers would be unreasonable without some compensation.

In the case of a scheme being revoked or an altered scheme substituted, compensation is strictly limited to any person who has incurred expenditure for the purpose of complying with the scheme, and is only to be paid in so far as any such expenditure is rendered abortive by reason of the revocation of the scheme.

Apparently therefore no compensation would be obtainable on account of variation in the value of sites due to variation in the scheme, but a scheme cannot be varied or revoked without opportunity being given to persons interested to object to such variation or revoking.

REVIEWS.

SOME BAROQUE ARCHITECTURE.

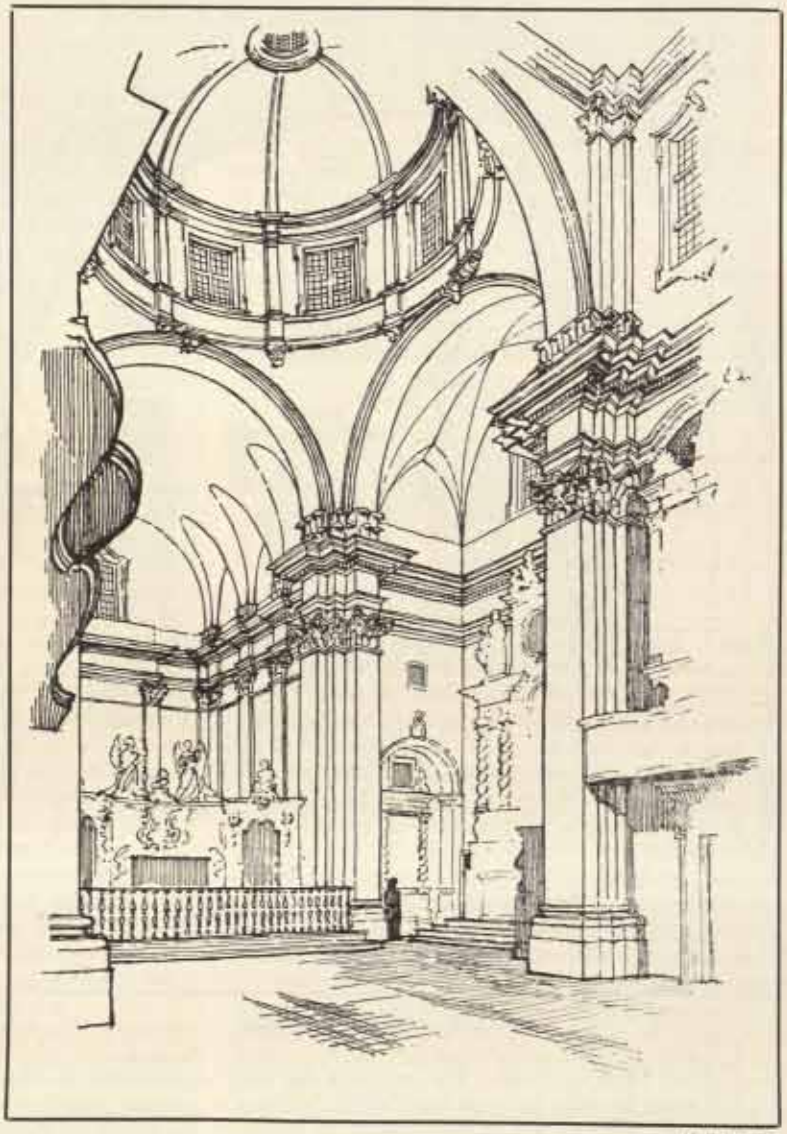
In the Heel of Italy. A Study of an Unknown City. By Martin Shaw Briggs, A.R.I.B.A., Associate of the British School at Rome and Extension Lecturer to the Universities of Oxford and Leeds. With 26 Drawings by the Author and 19 Photographs. 8o. *Lond.* 1910. *Price* 8/6 *net.* [*Andrew Melrose, 3 York Street, Covent Garden, W.C.*]

This book, named *In the Heel of Italy*, is the outcome of a commission which was given to the author by the editor of the *Architectural Review* some few years ago. He was required to explore the city of Lecce in Apulia and to describe its buildings. Mr. M. S. Briggs executed his task with such enthusiasm and thoroughness that he has been able to write what he claims to be "the first book in any language which outlines the story of the city's history, describes its inhabitants, their interesting province, and their remarkable achievements in art."

Although only twenty miles from Brindisi the city of Lecce is practically unknown. Its situation—close to a cosmopolitan port—and its picturesque obscurity bring to mind the similarly placed and comparatively unknown Dutch town of Middelburg, which lies close to the port of Flushing.

Some two hundred pages, more than half the book, are devoted to tracing the history of Lecce from the times of the Greek settlers right down to the Italian revolution in the nineteenth century. Mr. Briggs has brought much reading and research to this part of the work, comprising as it does the rule of the ubiquitous Normans and, later, of the Spaniards. This history is so complicated that it would require the pen of a Gibbon to render the whole story interesting and connected.

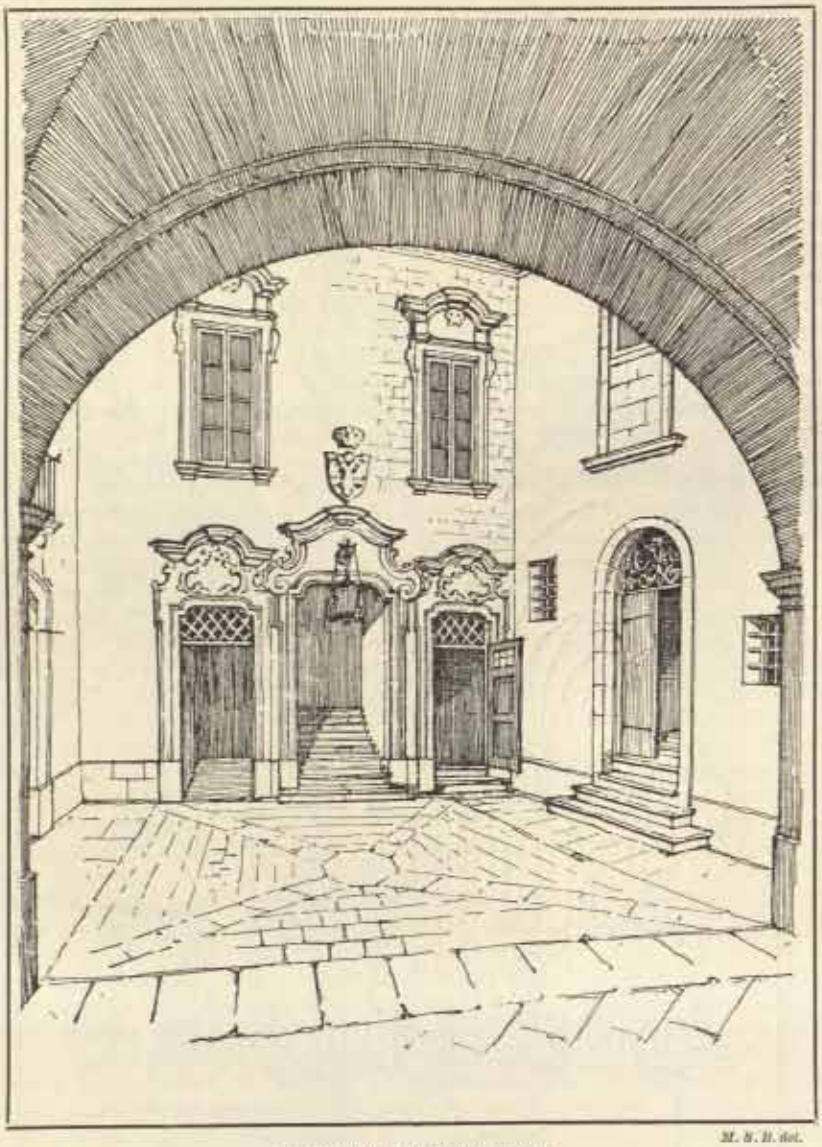
To an architect the interesting part of the book—that which describes the baroque period of building in Lecce—is far too short. However, the book is not intended solely for the architect, but for the general reader; and it is refreshing to see a book descriptive of a city written by an architect, for every historical city depends largely upon its buildings for its capacity to attract a modern visitor. It is possible for many people who are not professional historians to describe the history of such a city intelligently and accurately, but it is not given to all professional historians to write sympathetically of its architecture. Doubtless therefore Mr. Briggs had "the general reader" in view when he devoted so much space to the earlier history of Lecce and so little to the description of its characteristic architecture. It is true that of the forty-five illustrations in the book, some from photographs and the remainder from



CHURCH OF THE CARMINE, LECCE: INTERIOR. *M. S. B. del.*

drawings by the author, nearly half are illustrative of buildings in the baroque manner. These illustrations form a valuable addition to the text.

There were two great building periods at Lecce: the first, from 1540 to 1590, was inaugurated by Charles V. of Spain, while the second covers the years from 1660 to 1720. The energies of both periods were largely devoted to church building, owing to the advent and popularisation of several religious orders. The style—at first restrained and showing traces of Florentine influence—became more sumptuous with the advent of the Jesuits to the city in 1575. The middle of the seventeenth century was a barren period in the architectural history of Lecce owing, apparently, to civil disorders and the bad government of the Spanish viceroys. This coincides in point of date, curiously enough, with the stagnation in the building trade in England during the Cromwellian era.



M. S. B. del.

PALAZZO CONTE CASTRIOTA, LECCE.

During the second great building period in Lecce—1660 to 1720—an era coeval, as Mr. Briggs points out, with Sir Christopher Wren's career in England, many more churches and a large number of palaces were erected. The church façades which are illustrated appear to the English eye to be overladen with ornament of a type almost more than foreign in its exuberance. The palaces are more restrained, with many picturesque touches in balcony and window-head. But we do not gather that any big problems of planning or laying-out were attempted at Lecce, and we find ourselves wondering at the end of the book why the author's enthusiasm has been so aroused by the baroque architecture of this South Italian city. Perhaps we forget the sunshine and the atmosphere of the place.

Mr. Briggs defends the baroque style eloquently against the purist. "Will Rome," he says, "satisfy him if denuded of half her fountains and terraces, of half her open spaces, of most of her palaces and churches? Is he prepared to disallow the portico of S. Maria Maggiore or S. Andrea del Valle as model architectural designs? But will he go to Venice and still remain a purist? Can he pass the Salute and feel unmoved by its beauty? Yet the Salute is the very embodiment of the baroque." This style, as the author points out, is at its happiest and its best when employed in the laying-out of piazzas, fountains, gardens and terraces. But in Lecce the effect of the mediæval influence would seem never to have been lost, and "a lingering fear of war kept the Lecce patrician within his city walls, and thus deprived him of a garden or of any

opportunity of placing his house amid effective surroundings."

A careful and sympathetic study of the history of the baroque style, not only in one city but throughout Italy and the Continent, would form a most valuable addition to architectural literature, and Mr. Briggs has proved in this interesting book that he is capable of undertaking such a task. The causes that led to the revolt from the academic school of Palladio and the students of classical Rome, the influence of individual architects, the variations of the baroque manner caused by local conditions, the fashions set by the various great employers such as the Jesuits, the popes, and the later Medici—all these would form fascinating subjects for research. It would be interesting to know whether Michelangelo was not the inspirer of the baroque movement, as he was of most of the things that have happened in the history of art ever since his time. When Mr. Briggs does write his study of the baroque his chapter on the style in England will have to be a very short one. There was a moment in the reign of George II. when the English architect seemed to be tentatively experimenting with the style on his ceilings and in his mantelpieces; but when he came to the outside of the house he thought of our English climate—and refrained. SYDNEY D. KITSON [*F.*]

REINFORCED CONCRETE.

Reinforced Concrete. By Capt. J. Gibson Fleming, R.E. 8o. Chatham, 1910. Price 3s. 6d. net. [Royal Engineers' Institute, Chatham.]

Some seven years ago Colonel Winn published a small book on Reinforced Concrete which met with such general approval that it soon ran out of print. Colonel Winn, who was at that time Instructor in Construction at Chatham, has now transferred his energies to other fields, but has found a worthy successor in Captain Gibson Fleming, whose work on the same subject goes far beyond what was practicable in 1903. It is a small book of the same form as Colonel Winn's, published by the Royal Engineers' Institute at Chatham at 3*s.* 6*d.* net, in which, as Colonel Winn says in the Preface which he has written to it, "we have condensed into a convenient compass, a mass of practical information which should enable any one confronted with the task of designing and erecting reinforced concrete structures to tackle the subject with confidence and ease."

It is assumed, of course, that anyone can understand an argument or demonstration expressed in algebraic symbols, also that the reader has a general knowledge of elementary mechanics applied to building construction such as every young architect now possesses. The steps in the explanation are very fully detailed, and examples worked out of various problems are given to further assist the student.

But it is not only to the student with a slight knowledge of algebra and applied mechanics that the book appeals; it is full of valuable information on different kinds of bars, centering, materials, illustrations of different structures, &c., which can be understood and valued by the reader with no algebra.

The book is to some degree based on the Report of the Joint Committee of the Royal Institute of British Architects, and necessarily so, as that Report is the only official pronouncement in the country. The symbols used in the book are those in the Report, and as Captain Gibson Fleming is himself the representative of the War Office on that Committee, and has considerable experience in teaching in his work at Chatham, we find the latest information put in a simple way. It does not deal with the higher problems such as the man who specialises in the subject occasionally meets, but with all the ordinary questions which the architect and district surveyor has to settle. The information it gives is thoroughly sound and reliable, and while we are constantly learning, and to some degree modifying our views, the student of this work will have very little to unlearn.

There are some very interesting and original diagrams which simplify the calculation of T beams. These diagrams are very clear and accurate, and do not (as so many diagrams do) attempt to give too much information on each. They are very easily read, and will greatly reduce the labour of calculation in this intricate case.

It is a book which I can strongly recommend to all interested in the subject.

WILLIAM DUNN [*F.*].

PERSPECTIVE.

The Theory and Practice of Perspective. By G. A. Storey, A.R.A., Teacher of Perspective at the Royal Academy. Price 10s. net. [Oxford: Clarendon Press. 1910.]

In adding to the numerous books on this subject already existing, Mr. G. A. Storey tells us that his chief aim has been to make the rules of the science easy of application to the work of the painter, on whom he urges the necessity of studying this important, but too often neglected, branch of his art. Sound advice, certainly not unneeded, is given to the painter-student to endeavour to master the laws governing the representation of straight lines in his pictures, so that he may be independent of the services of the perspective expert and himself arrange the composition of his backgrounds and accessories with ease and correctness, to "make his stage and his scenery before he introduces his actors."

To this end instruction is given in various processes by means of which the perspective appearance of lines of known length and direction may be accurately found, the methods followed in the diagrams being explained in language as free from technicalities as possible and their application amply illustrated by attractive sketches. The

important preliminary question that arises when meditating a composition—the choice of position for the horizon with reference to the place the picture is to occupy—is discussed, Mr. Storey offering many interesting and valuable remarks on the practice of the great painters in this respect, with a number of examples selected from their most successful pictures.

The procedure apparently most favoured by the author, as he exemplifies it in the greater number of his diagrams, is the method of co-ordinates, where the position of a point in space is found by its perpendicular distance from three planes: the picture-plane, the ground-plane, and a vertical plane, each of which is at right angles to the two others. We are also introduced by Mr. Storey to his ingenious modification of this method of rectangular co-ordinates, by the substitution of a vertical plane at 45° to the picture for that at right angles to it. The advantage of these methods is that distant vanishing-points can be dispensed with, the centre of vision and distance-point alone being required, and, if desired, the constructions can be carried out within the limits of the picture by the use of a reduced distance-point. These processes are, therefore, of great service for tracing the main lines of simple detached objects, of pavements, steps, &c., also for fixing the heights of human figures, trees, &c., at various distances within the picture, when the vanishing-points are inaccessible, or at least at an inconvenient distance. Being simple in theory, the method of co-ordinates may be more readily understood by students unskilled in geometrical drawing, and it is doubtless on this account that Mr. Storey, from his large experience as a teacher, has considered it advisable to devote so much of his space to its elucidation.

On the other hand, the system is by its nature circuitous and laborious; the number of working-lines required, both in the necessary geometrical diagram and in the picture itself, is apt to produce confusion, so as to render its use practicable only for objects of very simple character. In cases of greater complexity the direct method, that of finding the proper vanishing-points of lines and vanishing-lines of planes, is therefore resorted to and illustrated by a few examples. This method, being the one adopted in our art schools, is, as the author admits, easy when you know it, and the disadvantage of the working-points being mostly outside the limits of the canvas, can be met by drawing the perspective separately on paper and transferring it to the canvas, or, in the case of a large picture, by drawing it to a small scale and squaring it up to the required size. After all, the benefit to be derived from working out the perspective on the canvas itself, from points within its limits, is a doubtful one; apart from the multiplication of lines before referred to, a strained canvas is an uncomfortable surface on which to rule lines with accuracy, or to remove them when correction is needed. A more complete exposition of the direct method might, therefore, have been profitable to the student; in addition to the practical advantages it presents, of fewer lines and greater accuracy, it is the only one that gives a comprehensive insight into the general perspective problem. (It may not be out of place here to recall the fact, not recorded by the great majority of modern text-books in their lists of the foremost writers on perspective, that Dr. Brook Taylor, the eminent mathematician, in his *Linear Perspective*, published in 1715, was the first to discover and enunciate the general principle of vanishing-points and vanishing-lines, and to embody the somewhat desultory efforts of his predecessors into a consistent, scientific theory,[1] to which little of any importance has been added since his time.)

Though it must be admitted, in agreement with the author, that some of the terms commonly used in perspective are not entirely satisfactory, still a departure from the terminology generally adopted in modern text-books is to be deprecated in the interest of the student wishing to extend his knowledge by consulting any of these. Thus, Mr. Storey uses the term "base-line" for ground-line, "perspective-plane" for ground-plane; he admits "vanishing-points" in the accepted sense, but denotes receding lines by "vanishing lines," and in the section on shadows uses the terms "plane of projection" and "plane of shade" as synonymous.

Some oversights in the solutions should be noted, such as those in the steps, fig. 252, and in the shadows of figs. 285 and 286.

The book is carefully printed, diagrams and sketches being, with very few exceptions, either on the same page with the explanatory text, or on the one opposite to it, so that frequent reference is made as convenient as possible.

H. W. Lonsdale [*Hon. A.*].

AN ENCYCLOPÆDIA OF ORNAMENT.

The Styles of Ornament from Prehistoric Times to the Middle of the Nineteenth Century. A Series of 3,500 Examples arranged in Historical Order, with Descriptive Text, for the Use of Architects, Designers, Craftsmen, and Amateurs. By Alexander Speltz, architect. Translated from the Second German Edition. Revised and Edited by R. Phené Spiers, F.S.A. La. 8o. Lond. 1910. *Price* 15s. [*B. T. Batsford, 94 High Holborn*].

There are many men who write and many who draw whose lot it is to be damned with faint praise. Their sole reward on earth is to reap a harvest of well-meant but thoughtless criticism from friends who marvel simply at the magnitude of the work accomplished, and know nothing of the spirit which lies behind. So many pages of an author's laborious writing, so many strokes of an artist's pen—such is their method of estimating a great biography which will last for centuries, a work of research and value which to students and scholars is a landmark or a goal, an architect's drawing which is as excellent to a painter's eye as to one of our ancient craft.

So that the tireless industry of this German architect, who has compiled a veritable encyclopædia of art through all the ages, has first of all to master the initial handicap which every compiler has to face, and which only genius perhaps can survive. There is virtue in a great thing accomplished, but it is discounted if one feels a taste in the mouth of too much having been attempted. At the outset, turning over the innumerable plates of this sumptuous volume, the enormous extent of the ground covered and the strain on Herr Speltz's versatile power of draughtsmanship, lead a reader to expect to find some weak places in his armour or some evidence of slackness in his work.

A book on historic ornament is of necessity very much of a *réchauffé* nowadays. Life is too short to hunt out examples from remote corners of the world which no wandering pen has recorded before, and if every object in this book were as familiar to us as the Doric Order we need not hold Herr Speltz up for abuse. The nineteenth century alone provided us with published reproductions of most of the finest examples of art in all countries and of all periods.

So that criticism of this book may be divided under three heads: as to the judgment displayed in selecting examples from the vast mass of available material, as to the method of its arrangement and presentation, and, lastly, as to its usefulness and attractiveness to the public for whom it appears to be intended.

Taking these in order, it will be generally agreed that this volume, which Mr. Spiers has so carefully edited, is on the whole a very excellent reference book dealing with every period of art from Stonehenge days to the neo-Grec movement in Germany. England, Italy, France and Germany seem to have been given their proper proportionate share, the classic periods are fully covered, but the value of the book is enhanced by the fact of its scope, including many phases usually neglected in works of this description—useful plates of American Colonial furniture and detail on the one hand, interesting sketches of ornament from places as far asunder as Russia and Cambodia on the other.

Nevertheless, there is many an art student and many an architect who would break a lance with this learned pair on their choice of subjects in the more hackneyed and more useful periods. There is little here of later pottery or china, nothing of Sheffield plate, and not enough of glass. To any but a virtuoso criticism of rare foreign furniture is forbidden, but one feels that the range of examples of English furniture is ill-judged. To put it in its baldest form, the furniture illustrated is not sufficiently English. As in so many picture books of furniture, we find here only elaborate and *outré* pieces, for the most part representing a time which was characterised by the perfect success of simple forms. The plates of the oak and walnut examples should have a more domestic tone, Chippendale should be credited with having designed something which one could put in a small house without making it uncomfortable, and some simple Sheraton chests, chairs, &c., would add a touch of reality to his work. In respect of English Gothic ornament, it may be doubted if this new book is more just than Mr. Richard Glazier's little handbook, small as the latter is, and few as are its examples. Turning to Herr Speltz's scheme of arrangement and his methods of reproduction, something can be said on both sides. The book is concise, useful and easy of reference. The bibliography is good and the index particularly handy for a designer in search of "inspiration" (as it is politely termed nowadays). The letterpress, though not aspiring to be thrilling literary matter, is sound, adequate and interesting.

Then we come to the question of the illustrations, and here especially a critic must tread cautiously. For who of us who has ever sat for examinations in historic art subjects has not felt the difficulty of passing from English Gothic to Athenian Greek, from drawing a Jacobean finial after acanthus foliage? We must admit, even the youngest of us, that in this respect, as in most others, the book displays a great range of talent. Herr Speltz is wonderfully facile in his pen-and-ink drawings, and in most cases they are works of art in the best sense. In hardly any case out of the many thousands before us is there any instance of what is known in architects' offices as "sloppy" drawing, that is, where a man's aspirations have been too much for his patience.

Yet there are a great number of examples where he does not seem happy, where he does not seem at home with his subject or in sympathy with it. These occur at intervals through the book without any apparent reason, and we can only assume that on these occasions his untiring hand needed—as it certainly deserved—a well-earned rest. In some of his most architectural sketches, and in some of his figure subjects (such as the Colleoni statue and other Italian sculpture) we find him drawing far below his high level.

But admitting that this book is in almost every way an excellent work, and acknowledging the admirable format so characteristic of Mr. Batsford's house, there still remains for consideration the reception it will meet with in English art circles.

It is intended for the English architect and craftsman, and, for certain periods, such as the Adam style, it is a great acquisition to any architect's library. As a students' text-book it is little more useful to an architect than to an art student sitting for a S.K. examination, perhaps less so. It does not supersede Mr. Spiers' own book of classic orders and ornament, and by its nature cannot do so. Herr Speltz does not appreciate English Gothic as well as he does most of his subjects, and on that

score one cannot recommend it as a R.I.B.A. text-book unaccompanied by a more specialised treatise.

But an architect who has been fortunate enough to receive a general training in all branches of art, wide enough to broaden his outlook, is of necessity interested in other things beyond the humdrum routine of his office, and for any such this book must be attractive indeed.

With daily reminders of the appalling, if improving, state of taste in methods of art in England, of the ignorance in regard to the possibilities of making common things beautiful, of almost all art beyond hackneyed paintings and misunderstood churches, an architect can only wish that the great, stodgy, respectable, and deadly dull British public could have forced down their throats some of the elementary truths about the glorious historic art of bygone ages which Herr Speltz has so tastefully and monumentally recorded for us in his handsome volume. M. S. Briggs [*A.*].

SCHOOL OF ARCHITECTURE, LIVERPOOL.

Exhibition of Students' Work.

On Thursday 7th July a house-warming was given by Mr. and Mrs. W. H. Lever at the new home of the Liverpool School of Architecture. The buildings have already been described and illustrated in the Journal. Suffice it now to say that in the glory of much fresh paint and radiant with window-boxes and summer sunshine the old Blue Coat School looked its best. But it was rather a shock to find that the opening of a new chapter in the existence of the old building should synchronise with a changed name. The new title of "Liberty Buildings" rather ruthlessly destroys association with the past. The new premises of the School of Architecture lend themselves admirably to a combined Exhibition and Strawberry Fête. Those invited were equally charmed by the hospitality of Mr. and Mrs. Lever and the Exhibition arranged by Professor Reilly of the work done by students in the school who have just completed their course. Of the twelve exhibitors two have obtained distinction, eight have gained the Diploma, and two will have to try again. The drawings of the last named were by no means lacking in quality or quantity, and they serve to remind us that the standard of the school is so high that only those with ability and industry can hope to reach it. Each of the twelve showed all the drawings made in the school and vacations of the last two years, including designs, studio work, and measured sketches and finished drawings of notable buildings. It was possible to see the budding architect's progress from the earliest effort. Some students had spent most of the vacations working in offices, others in measuring old buildings, therefore the total output varied. A few students had travelled abroad, but one and all had in whole or part measured an important classical building. St. George's Hall, and the Liverpool Town Hall, the Dublin Customs House, the Library at Trinity, Cambridge, the Taylorian at Oxford, are all fully illustrated: many of the drawings, especially the half-inch scale details, are admirable for second-year work.

Mr. E. Gee is the only student whose colouring is equal to his drawings. His wash sketches of some doors are especially good. The best draughtsman for uncoloured drawings is Mr. Prestwich, the winner of the prize for laying out the vacant ground in the heart of Port Sunlight. He is to be congratulated for dealing with the subject in a most comprehensive way and seizing on the essential points, and Mr. Lever is fortunate in receiving such a capable design. The largest output is by Mr. W. R. Owens. His drawings are innumerable and show extraordinary industry. The draughtsmanship, however, might be improved.

Mr. Hampshire, one of last year's travelling students, shows some charming sketches of Florentine tombs, and Mr. Berrington, who has gone down rather longer, shows the drawings which so nearly won him the Academy Travelling Scholarship and the Soane.

The general impression created by the Exhibition is that the students work uncommonly hard both in term and vacation, and that the standard in drawing classical work is very high. Design is as good as can be expected in two years. In that short time some subjects must be neglected, but the absolute disregard of Gothic in all its phases seems a pity. A little more time too might with advantage be devoted to colouring at any rate the smaller and simpler drawings.

Hastwell Grayson [*A.*].

The Town Planning Review.

An advance copy is to hand of the second number of the *Town Planning Review*, the quarterly journal of the School of Civic Design, University of Liverpool. The principal contents include articles by Professor Adshead, one detailing his scheme for remodelling the central area of Liverpool; another on the administration and possibilities of the Procedure Regulations of the Town Planning Act; and a third on Cathays Park, Cardiff. Mr. Patrick Abercrombie concludes his interesting review, begun in the first number, of Examples of Modern Town Planning and "Garden City" Schemes in England, and continues his description of contemporary schemes in America. Mr. John A. Brodie, Liverpool City Engineer, traces the development of Liverpool and describes the progress of the scheme for its Circumferential Boulevard. The number includes some forty or more plates of plans and views illustrating the various contributions. In some notes on Port Sunlight are given memoranda of the capital outlay (over £500,000) expended on this village from the beginning, and the maintenance account for 1909.



9 CONDUIT STREET, LONDON, W., *30th July* 1910.

CHRONICLE.

TOWN PLANNING CONFERENCE:

LONDON, 10–15TH OCTOBER 1910.

Subjoined is a copy of the Preliminary Announcement and outline Programme of the forthcoming Conference, which is being widely circulated among architects and others throughout the British Empire and in various countries on the Continent of Europe and America. In a covering letter signed by the President and the Secretary-General the hope is expressed that all architects practising in the United Kingdom will realise the importance of the Conference, and give it their hearty support, both by becoming members themselves and by directing to it the attention of laymen who are interested in the subject of Town Planning. The document is as follows:—

DEAR SIR,—We have the honour, on behalf of the Executive Committee, to invite your attendance at the Town Planning Conference which will be held in London during the week 10th–15th October 1910.

The recent passing into law of the Housing and Town Planning Act of 1909 has rendered the careful consideration of the architectural development of town planning a matter of immediate importance. The Royal Institute of British Architects has, therefore, decided to organise a Conference to study the questions involved in the improvement and extension of our cities, with special reference to the artistic and constructional problems involved.

His Majesty the King has graciously extended his patronage to the Conference, and a list of the distinguished gentlemen who have consented to become Vice-Presidents is enclosed for your information.

MEMBERSHIP.

The Conference will be open to architects and to all others, including ladies, who are interested in the subject of town planning.

The membership fee will be One Guinea.

As the number attending the Conference is necessarily limited an early reply is desirable.

PRIVILEGES.

Members will receive without further charge:—

- A card of identity.
- A case for the various tickets issued.
- The Conference badge.
- All the literature issued in connection with the Conference.
- A handbook descriptive of the visits and excursions.
- The illustrated volume of "Transactions," containing the text of the Papers contributed, reports of discussions, and a record of the Conference.

Also invitations to:—

- The Inaugural Meeting at the Guildhall.
- The Reception at the Mansion House by the Lord Mayor.
- The Conversazione given by the Royal Institute of British Architects.

And will be entitled to attend:—

- All the meetings of the Conference.
- The Exhibition of Drawings and Models at Burlington House.
- The Special Exhibition of Town-Planning Literature and Documents in the Library of the R.I.B.A.
- The Exhibition of Plans of London in the Guildhall.
- The visits and banquet (on payment of the necessary charges).

By the kindness of some members of the Zoological Society of London a certain number of tickets of admission to the Gardens of the Society's collections in Regent's Park for Sundays the 9th and 16th October will be placed at the disposition of foreign members and allotted in order of application.

The Royal Botanic Society have kindly accorded free admission to their Gardens for members during the Conference week.

Negotiations are in progress with the British railway companies for the issue of return tickets to London at reduced rates to members of the Conference. With regard to these and to reductions on Continental railway systems, members will be made acquainted as soon as possible with the arrangements the Executive Committee have been able to make. Messrs. Thomas Cook & Son have kindly undertaken to give special instructions to their agents at all their Continental offices with regard to information to visitors proposing to attend the Congress.

A Ladies' Committee has been appointed to arrange for the comfort and entertainment of lady members.

By the kindness of the Club Committee lady members of the Conference who are visiting London will be constituted honorary members of the Lyceum Club (for ladies).

The Directors of the Arts Club, 40 Dover Street, Piccadilly, have kindly promised to accord to foreign members during the Conference the privilege of honorary membership.

Lady members of the Conference who are desirous of availing themselves of the privilege of honorary membership of the Lyceum Club, and foreign members who are desirous of availing themselves of similar privileges of the Arts Club, are requested to send their names to the Secretary-General as soon as possible.

LECTURES AND PAPERS.

Original Papers, many illustrated by lantern-views, will be read on :—

"Cities of the Past :" "The Hellenistic Period," by Professor Percy Gardner, LL.D.; "Rome," by Dr. Thomas Ashby, of the British School at Rome ; "The Roman Empire," by Professor F. J. Haverfield, M.A., F.S.A., and others.

"Cities of the Present," by Professor Baldwin Brown [*H.A.*], Mr. C. Mulford Robinson, of Rochester, N.Y., Mr. H. V. Lanchester [*F.*], and others.

"City Development and Extension," by Mr. Raymond Unwin, Monsieur Augustin Rey, A.D.G., of Paris, Mr. W. E. Riley [*F.*], Superintending Architect of the London County Council, and Professor Dr. Rudolf Eberstadt, of Berlin.

"Cities of the Future," by Professor C. H. Reilly, of Liverpool University, Monsieur Eugène Hénard, A.D.G., Author of *Les Transformations de Paris*, Mr. Daniel H. Burnham, of Chicago, U.S.A., Mr. L. Cope Cornford, and others.

Special Papers have also been promised by Col. Eustace Balfour, A.D.C., F.S.A. ("The Town Planning Act and Open Spaces") ; Sir W. B. Richmond, R.A. ; Professor Geddes, of Edinburgh ; Mr. H. H. Statham [*F.*] ("A Suggestion for the Treatment of Trafalgar Square") ; Mr. John Sulman [*F.*] ("The Federal Capital of Australia"); Mr. T. H. Mawson [*H.A.*] ("Public Parks and Gardens"); Mr. Basil Holmes, C.C., Secretary of the Metropolitan Public Gardens Association ("Open Spaces, Gardens, and Recreation Grounds") ; Mr. W. H. McLean, City Engineer of Khartoum ("The Planning of Khartoum and Omdurman") ; Mr. Arthur Crow [*F.*] ("Town Planning in Relation to Old and Congested Areas, with Special Reference to the Inner Belt of London") ; Mr. C. H. B. Quennell [*F.*] ("Town Planning and Land Tenure") ; Mr. Harold C. Dowdall, M.A., B.C.L., of the University of Liverpool ("The Growth of Legal Control over Town Development in England") ; Professor S. D. Adshead, and others.

The Executive Committee will be glad to receive Papers on any of the above subjects for presentation to the Conference. Papers may be written in English, French, German, or Italian.

Papers must reach the Executive Committee before the 12th September 1910.

LANGUAGES.

The language of the Conference for the purpose of discussion will be English.

The Papers contributed will be read and printed in whichever of the above mentioned four languages they are written, and will so appear in the volume of "Transactions." Members of the Conference specially interested in any of the subjects to be dealt with at the Meetings can have advance copies of the papers to be read sent to them on application to the Secretary-General.

The notices issued during the Conference week will be in French and English.

Several ladies and gentlemen will give their services during the Conference as Honorary Interpreters, and will wear coloured ribbons indicating the nationality of the language with which they are conversant.

EXHIBITIONS.

By the courtesy of the Royal Academy an Exhibition of models and drawings illustrating important Town Planning Schemes in various countries will be held in the galleries of the Royal Academy, Burlington House, Piccadilly.

The rooms of the Library of the Royal Institute of British Architects will be devoted to an exhibition, arranged by the Librarian, Mr. Rudolf Dircks, of literature dealing with the subject, as well as of maps and original drawings possessing either a direct or cognate interest, selected from the Institute collections.

With the consent of the Corporation of London the City Surveyor, Mr. Sydney Perks, F.S.A. [*F.*], has undertaken to arrange a selection of maps and plans of London, from the City collections in the Guildhall.

THE INAUGURAL MEETING.

The Inaugural Meeting will be held at the Guildhall (by kind permission of the Court of Common Council) on the 10th October, when the Inaugural Address will be delivered by the Right Hon. John Burns, M.P.

BANQUET.

The Conference Dinner will take place at the Hôtel Cecil on Wednesday, 12th October, in the Grand Hall, at which it is expected that a large number of members of the Conference, including ladies, will attend.

VISITS.

The following visits have been provisionally arranged, and further particulars will be issued :—

On Tuesday, 11th Oct., to Letchworth Garden City, Hampton Court Palace, and Hatfield House. The Art-Workers' Guild have kindly undertaken to arrange a visit to the Inns of Court, and to offer tea in their Hall of Clifford's Inn to the visitors.

On Wednesday, 12th Oct., to Bedford Park, the London County Council Housing Schemes, St. Paul's, St. Bartholomew's, the Tower, and Greenwich Hospital.

On Thursday, 13th Oct., to Hampstead Garden City, and to Kensington Palace and Gardens.

On Friday, 14th Oct., to Regent's Park and neighbourhood, Bridgwater House, and Stafford House.

On Saturday, 15th Oct., to Port Sunlight, Bournville, Bath, and Oxford.

MISCELLANEOUS.

We have the pleasure to enclose a form of membership which we hope you will be able to fill up and return, together with your cheque or postal order for One Guinea.

Should you definitely decide to join the Conference, it would be a great convenience to the Committee, if you would return the form of membership at the earliest possible date. Should you find yourself later compelled to withdraw from the Conference before it opens, your subscription will be returned to you.

To avoid mistakes in spelling and other errors, we venture to request you to let us have your name and address printed, either on your letter paper or your visiting card.

All communications should be addressed, and all cheques and postal orders made payable, to "The Secretary-General, Town Planning Conference, Royal Institute of British Architects, 9 Conduit Street, London, W."—We have the honour to be, Dear Sir, Yours very faithfully,

LEONARD STOKES, *President.*
JOHN W. SIMPSON, *Secretary-General.*
IAN MACALISTER, *Secretary R.I.B.A.*

Valuers under the New Finance Act.

The attention of the Council having been drawn to a statement that appointments as valuers under the new Finance Act were open only to members of the Surveyors' Institution, the Council directed inquiry to be made, and the following correspondence has passed between the Institute and Somerset House :—

28th June 1910.

SIR,—I am much obliged by your prompt reply to my letter of the 24th instant with reference to the appointment of Official Valuers under the Finance Act of 1909–10. I am afraid that perhaps I did not put my question quite clearly. Am I right in thinking that members of the Royal Institute of British Architects who are not members of the Surveyors' Institution may be favourably considered for appointments as valuers ?

I am, Sir, your obedient servant,

IAN MACALISTER, *Secretary R.I.B.A.*

The Chief Valuer, Inland Revenue.

Somerset House : 30*th June* 1910.

SIR,—Referring to your letter of the 28th instant, I have to acquaint you that applications from members of the Royal Institute of British Architects who have had good experience in the valuation of land would be favourably considered for appointments as valuers.

I may add that at present there are very few vacancies, and these are only on the temporary staff.

I am, Sir, your obedient servant.

R. J. THOMPSON, *Chief Valuer.*

The Secretary R.I.B.A.

Council Appointments to Standing Committees.

The following appointments to Standing Committees have been made by the Council in accordance with By-law 51 :—

ART.—Messrs. T. Raffles Davison [*H.A.*], W. A. Forsyth [*F.*], Sir George Frampton, R.A. [*H.A.*], S. S. Reay [*F.*], Sir Aston Webb, C.B., R.A. [*F.*].

LITERATURE.—Messrs. Francis Bond, M.A.Oxon. [*H.A.*], J. D. Crace, F.S.A. [*H.A.*], W. Curtis Green [*F.*], Sir A. Brumwell Thomas [*F.*], E. P. Warren, F.S.A. [*F.*].

PRACTICE.—Messrs. Ernest Flint [*F.*], A. W. Moore [*F.*], Herbert A. Satchell [*F.*], W. Henry White [*F.*], W. Gilmour Wilson [*F.*].

SCIENCE.—Messrs. R. J. Angel, M.Inst.C.E. [*A.*], C. E. Hutchinson [*A.*], F. N. Jackson [*H.A.*], F. T. Reade [*H.A.*], A. T. Walmisley, M.Inst.C.E. [*H.A.*].

Properties and Ingredients of Commercial Paints : Science Committee's Report.

On the 22nd October 1908, at the instance of Mr. Max Clarke, Chairman of the Science Standing Committee, a Sub-Committee was appointed to investigate and prepare a report upon the properties and ingredients of commercial paints. The Sub-Committee consisted of Messrs. Alan E. Munby, M.A. Cantab. [*A.*], *Chairman* ; R. J. Angell, M.Inst.C.E. [*A.*], Francis Hooper [*F.*], John H. Markham [*A.*], H. D. Searles-Wood [*F.*], Digby L. Solomon, B.Sc.Lond. [*A.*], E. W. M. Wonnacott [*A.*], Matt. Garbutt, A.M.Inst.C.E., *Hon. Secretary.* The Sub-Committee's investigations continued until the 9th June last, when their final Report was submitted to and approved by the full Committee. The Report has since been presented to the Council of the Institute, and has been adopted by them and ordered to be published in pamphlet form.

The purpose and scope of the Committee's inquiry are indicated in the following introductory note to the Report :—

The R.I.B.A. Standing Committee on Science has had before it for some time the question of the formulation of standards for materials used in the paint trade, with a view to assisting architects, and incidentally the reputable vendor, by the drawing up of some more precise definitions of paint materials than at present exist.

A sub-committee formed to consider the matter has made an investigation of current literature with the object of ascertaining the present state of knowledge and opinions on the subject, which, though it forms but a small part of the wide field covered by an architect's work, is of considerable importance in the light of the cost of constant repainting coupled with the great openings for the use of inferior materials.

The whole subject has been found to be so complex, and any unanimity of opinion so lacking, that it appears unlikely that any precise standardisation will be attainable for some time to come. It has, therefore, been decided to produce the following monograph with a view to drawing attention to those attributes of paint and those ingredients in its composition which, in the opinion of the Committee, chiefly regulate its quality.

The following brochure comprises some brief general

comments upon paints, followed by a summary dealing with the composition of and tests for some individual materials; and although the matter as presented is not suitable for an architect's specifications, nor intended to set up actual standards, it is hoped that it may serve to draw attention to the subject and, to a small extent, to epitomise the problems in question.

The pamphlet is now on sale at the Institute, price 6*d*.

International Hygiene Exhibition, Dresden, 1911.

The Institute has received the Programme and other printed papers of the International Hygiene Exhibition to be held at Dresden next year from the 1st May to the end of September. The King of Saxony is Patron, the German Imperial Chancellor heads the list of Hon. Presidents, and the Imperial and State Governments are co-operating in the promotion of the project. The Exhibition is to include five sections: the Scientific, the Historical, the Popular, the Section of Sports, and Industry. The most extensive is the Section of Science, which aims at presenting as completely as possible a universal picture of the science of hygiene, with special reference to its most recent acquisitions. The section is divided into forty-four groups and sub-groups, including among them subjects which appeal specially to the architectural profession. Group I. deals with Light, Air, Soil and Water; Group II. with Planning of Towns and Cities, Building Regulations, Planning of Buildings, Ventilation and Heating; Group V. with Special Industrial Hygiene and Care of the Working Classes. The section of Building is to be presided over by a distinguished Corresponding Member of the Institute, Dr. Stübben, of Berlin. The prospectus states that it is assumed that foreign countries will arrange special exhibitions with which, as a rule, institutions and individual exhibitors of the country in question might be associated; but foreign exhibitors are at liberty to arrange for their own exhibits in the various groups of the Scientific Section. The prospectus has been before the Institute Science Committee, and they suggest that members of the Institute should take some practical interest in the event, and, as far as they are able, participate individually in the Exhibition. Particulars may be obtained from the Secretary of the Administration, Zwickauer Strasse, 35, Dresden.

Suggested Improvement at Hyde Park Corner.

The plan on the opposite page illustrates Mr. F. W. Speaight's suggestion for an improvement at Hyde Park Corner, which he puts forward as a means of providing a suitable site for the National Memorial to King Edward VII. Mr. Speaight states that the space available for the suggested improvement would provide an enormous Place, 725 feet long and 410 feet broad. Its area, approximately 300,000 square feet, would be nearly three times as large as the Piazza S. Marco at Venice, and considerably more than twice the size of Parliament Square. Part of the scheme includes the widening of Piccadilly. It is suggested that the present roadway should be widened by 20 feet, thus bringing the curb on a line with the existing railings of the Green Park. "The fine row of trees," says Mr. Speaight, "that at present is situated just within these railings, would line with the new curb, and convert the South Pavement of Piccadilly into a delightful boulevard." It is further suggested that the east and west boundaries of the proposed Place would be suitable sites for the Shakespeare Memorial Theatre, and, at some future date, a National Opera House on the site of St. George's Hospital. The scheme involves the removal of Decimus Burton's Arch, which the author would make the central feature of the southern boundary of the new Place. The Wellington statue, which would have to be removed, Mr. Speaight considers would be more appropriately placed in the Horse Guards Parade, or re-erected in Hyde Park at the corner of Rotten Row, immediately facing Apsley House. Mr. Speaight acknowledges indebtedness to Mr. A. W. S. Cross [*F.*] for several valuable suggestions in connection with the architectural treatment of his scheme.

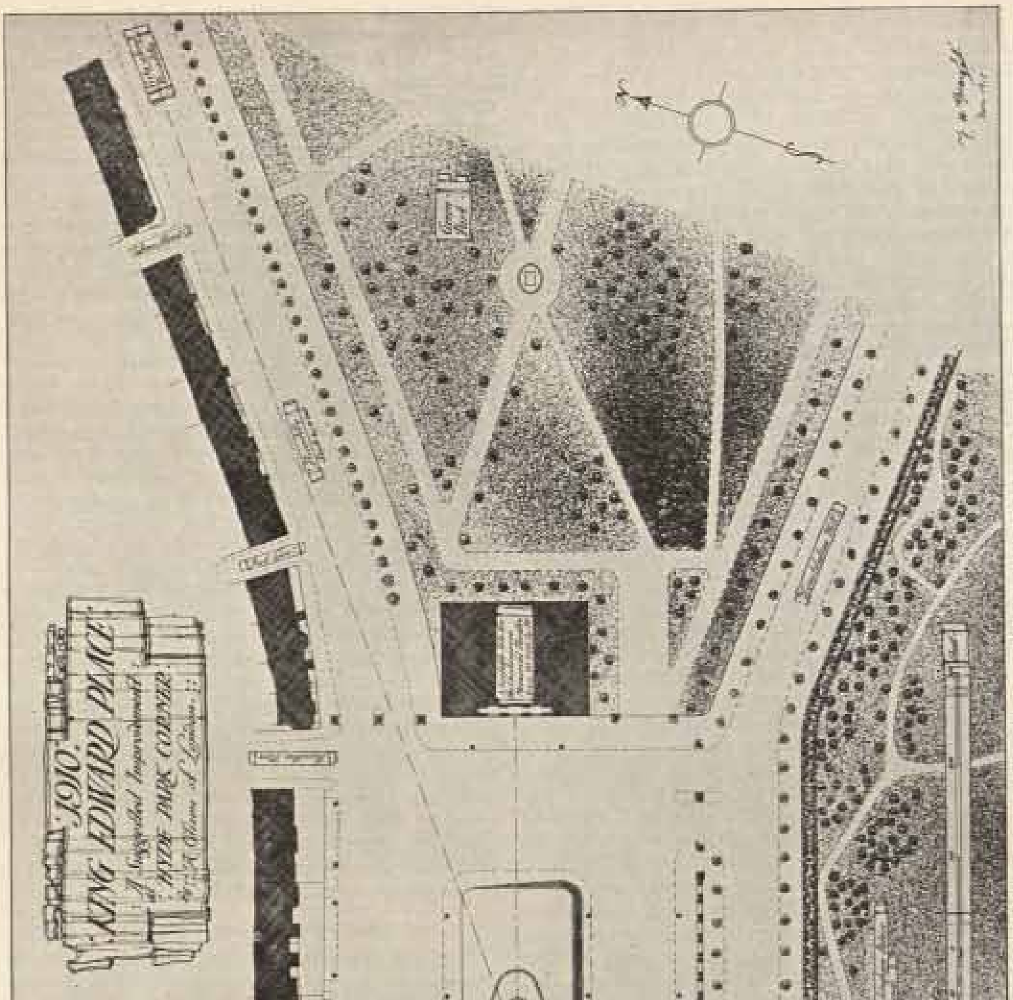
Rome as an Archæological Centre.

The Times of the 11th inst. published the following from its correspondent at Rome:—

Now that the formation of a "Society for the Promotion of Roman Studies" is accomplished, and the society itself, numbering amongst its members some of the most eminent names in the field of archæological and historical research, has held its inaugural meeting and entered a powerful and authoritative plea on behalf of its cause, a few words may, perhaps, be permitted from Rome itself to supplement its advocacy. First, in defence of Rome as an archæological centre; secondly, in support of the British School of Rome, now nearing the tenth year of its existence, which in spite of its very limited means has accomplished much admirable work and already won for itself an honourable place among the many learned institutions of the Eternal City.

NEED FOR REVIVAL OF ARCHÆOLOGICAL INTEREST IN ROME.

Popular interest in archæology naturally follows the course of archæological research, and that has for many years past steadily drifted Eastward, following the receding origins of civilisation. Rome, only half a century ago the Mecca of the archæologist and student of sculpture, has been deserted for other fields and almost neglected. Older civilisations and a purer form of art have tempted away her devotees, and popular sentiment has followed them, exaggerating, as is its wont, the reasons of their desertion. It seems to be not an uncommon belief among the younger students of to-day that a sojourn in Rome for the purpose of study is mere waste of time. Rome, they say, has no sculpture, no architecture, no field of research to be compared with what is offered by Greece. They are mistaken, and their error, if persisted in,



PLAN OF MR. F. W. SPEAIGHT'S SUGGESTED IMPROVEMENT AT HYDE PARK CORNER.

may be seriously prejudicial to the progress of archæology. In the first place, Rome and Italy are only a half-explored field in which quite as much remains hidden as has already been discovered. In Rome the Forum, the Palatine, the surrounding Campagna, the recent excavations at Ostia, to say nothing of the topography of the city itself, offer innumerable problems which still wait solution. In Italy a good deal has been done of late years in the way of excavation by Italian archæologists which is well worth the attention of the foreign student. And far more remains to be done, and might possibly have had a beginning before now had not the indifference of the outer world reacted upon Italian sentiment and produced a like indifference here; for one cannot but recognise that Italian interest grows or flags in proportion to that which is shown in Italian archæology abroad.

But there is a more important reason for the resumption of Roman and Italian research. At the inaugural meeting of the Society for the Promotion of Roman Studies Mr. Butcher remarked how modern scholars had become more aware of the diversity of the civilisations of Greece and Rome than of their unity. It had been assumed that all classical civilisation could be regarded as one structure and presented as a single whole. Modern research has tended to undermine this theory rather than to confirm it; and now it is necessary either to find the lost connections or at least to study the early Italian civilisation anew and more fully. As Mr. Peet says in his recent work on prehistoric Italy, the ever-increasing proof of the connection of Italian prehistoric civilisation with the Ægean and North Greece makes its study more and more indispensable for a Mediterranean archæologist. In Malta and Sardinia a beginning has already been made. The object here has been to attempt a research into the so-called megalithic civilisation which is characteristic of many parts of the Western Mediterranean. A further exploration of Sardinia and more excavation in Malta will be necessary for the purpose, and also scholars are required who would specialise in the Spanish, French, and North African sides of the megalithic area. Attention should be paid to the relation of megalithic religious cults with those of the prehistoric Ægean, Crete, and the East. Some comparisons have been suggested, but, as they have never been seriously worked out, their value is not known. While speaking of Sardinian research it should be added that the failure to publish Mr. Duncan Mackenzie's reports in an English journal is a matter of great regret to all concerned. As it was they found a publication in foreign periodicals. It is to be hoped that the School will try to remedy this neglect by the production during the next few years of really adequate books both on Sardinian research and on prehistoric Malta.

PREHISTORIC ITALY.

Mr. Peet's admirable volume on the Stone and Bronze Ages is an attempt to reduce to order the work which has already been done within Italy, so as to clear the way for future research. He has done this for the Stone and Bronze Ages, and hopes shortly to do the same for the early Iron Age. Then the general inquiry can begin, and, according to Mr. Peet, it should obviously follow these lines:—(1) A study of the paleolithic periods in Italy and the islands; the interest of this study to European geologists need not be insisted upon. (2) An exploration of the interior of Sicily with the special object of finding megalithic remains. This, of course, could be combined with a search for later ruins. (3) A study of early South Italy and its relations to the Ægean. This is a field which has been opened up by recent excavations. It would need, of course, a close acquaintance with Ægean antiquities. (4) The Etruscan problem. This question is really no more advanced than it was thirty years ago. It is, perhaps, the most interesting of all lines of inquiry, but it needs a student with a good knowledge of Greece and the East. There is also, for a philologist, the question of the Etruscan language. (5) A study of the period just before the beginning of Roman history. Its history, its archæology, its religion, working back to what is known of prehistoric religion in Italy—of which evidence is now accumulating—and coming up to the early myths of Etruria and Rome. And with this a study of the old Italic dialects, which has hardly yet been attempted except by one English scholar, who has not been able to give much time to the research. (6) The geometric vases of the early Iron Age in Italy and Sicily and their relation to the geometric vases of Greece.

The scope of the inquiry is therefore immense. But in every branch of it the same remark applies—that it is useless to pursue any research without reference to Greece and the Ægean. The two countries, Italy and Greece, seem to run side by side in all periods, and one country can only be understood by reference to the other. Before leaving this subject, and with reference to the Etruscan problem, it may be added that our ignorance of the real nature of Etruscan art offers the greatest obstacle to our understanding of the development of antique art in its earliest phases. The Etruscan phenomena must be collected and examined anew in the light of recent Greek discovery. Possibly with the result that the Etruscans—like the Phœnicians—may disappear altogether as original factors in the early province of art.

THE STUDY OF CLASSICAL ART IN ROME.

In his *Masterpieces*, written eighteen years ago, when the enthusiasm for discoveries on Greek soil was at its height, Furtwängler says that for any complete picture of the history of ancient art the great bulk of material must still be sought in the Roman museums. Other cities or sites—Greece, for instance, or our own British Museum—may have finer examples of particular periods; but the historical development of classical art as a whole can best be traced in Rome, owing to the vast range of examples found in its museums from all periods of the Antique. Nor are all its art treasures, as some people seem to suppose, copies of lost originals. There are a large number of Greek original works of great beauty and interest. Not the Fanciulla of Anzio, whose claims to be considered a Greek original are daily decreasing outside the still faithful circle of Italian archæologists, but works whose presence for a long time past in the Roman museums is too easily overlooked—the series, for instance, of original archaic Greek sculptures in the Palace of the Conservatori in the Capitol; the Niobid, now in Milan, though it is hoped only temporarily; the Ludovisi throne in the Museum of the Thermæ; such statues as the Barberini "suppliant," an authentic though little-known work of the Pheidian School; the splendid head of a goddess, of the School of Damophon, in the Capitol; the head of the Dionysius in the room of the Gladiator in the

Capitol; the heads and other fragments in the Baracco Museum, many of which were actually found on Greek soil. In Rome, too, the later Græco-Asiatic schools, which now attract so much attention, can be studied as nowhere else—the Laocoon, the "Dying Gaul" and its fellows, the long series of Hellenistic portraits, and the countless pictorial reliefs, which, whether produced in the Hellenistic or the Roman period, are products of influences remounting to early Ionian art. Finally, the great art and architecture evolved in the service of Rome herself (without going into the controversial questions of its origins) can be understood in its entirety only in Rome.

CHRISTIAN, RENAISSANCE, AND LATER ART.

In spite of all that has been urged in favour of a Byzantine-Asiatic origin of Early Christian art, the actual phenomena, the productions of that art, must always be largely studied in Rome. And in this field the recently discovered paintings of Santa Maria Antiqua, first described by Mr. Rushforth, Director of the British School, alone by themselves give Rome a unique importance for medievalists. In the matter of Renaissance art it was very truly said by Sir Rennell Rodd, in one of his lectures before the British School, that in art the part played by Rome has always been to assimilate rather than to create. But this very fact constitutes her interest to a student. Since the earliest days of art to the latest times of the Baroque, it is in Rome that the successive great periods of arts have found supreme expression, and the interaction of diverse artistic influences upon each other can best be studied. In short, whether it is a question of studying antique, medieval, or Renaissance art, it is in Rome, above all other places, that we find the final achievement, if not the original inspiration. The city which holds such masterpieces of Michael Angelo and Raphael must remain the most significant and the most capable of giving a final impression to students and artists.

As regards architecture, it must be admitted that the earlier periods of the Renaissance are scantily represented. The Gothic, a growth to which Italian soil was at the best never entirely congenial, can only be seen in a few meagre reflections; but every succeeding phase, from the flat-pilastered courts of Bramante to the fantastic shapes of the Baroque, is fully represented. The later Renaissance forms have directly influenced English architecture through Inigo Jones, and still continue to inspire it. A large number of young English architects come to Rome every year to study, though they have no centre such as the French have at the Villa Medici and the Americans at the Villa Mirafiore. Until the British School offered them hospitality they had no place at all where they could work or meet for the purpose of discussion or consulting books of reference. This year alone fifteen architects have studied at the school.

OTHER ARCHÆOLOGICAL WORK IN ROME.

But to return once more to the work of the archæological student. There is one field that is always open to him, and where he is greatly needed, and that is in the making of catalogues. The British School some years ago undertook a catalogue of the Capitoline Museums on a scale which vies in completeness with Professor Amelung's catalogue of the Vatican Collections. This has been largely the work of Mr. Stuart Jones, the second Director of the School, who has been assisted by Professor Percy Gardner, Mr. Daniel, and Mr. Dickens. It will be published by the Clarendon Press, and it is hoped that the first part, comprising the collections in the Museo Capitolino proper, may be out this year, and that next year the second part, describing the Museo dei Conservatori, may be well advanced. The need of good catalogues opens an endless field of work in Rome and in all Italy. Nor is the labour without excitements of its own, for the useful exploration of museums frequently leads to discoveries quite as startling as those of any new excavation. Another branch of archæological study, that of Oriental cults, has been opened by the recent discovery of a sanctuary of the Syrian gods on the slope of the Janiculum. M. Gauckler and M. Davier have laid bare in their excavations an almost perfect example of a Syrian temple, thus giving material proof of the powerful influence which the Oriental cults, in spite of all official efforts towards their suppression, exerted upon the Romans. The fact that this important excavation was carried out by a French and a Swiss archæologist leads one to hope that the Italian authorities may be induced to grant permission to foreigners to excavate elsewhere. As a matter of fact the Italian authorities always profess their willingness to allow excavations under certain conditions; but it depends a good deal upon the manner in which they are approached whether they make these conditions possible or not.

THE BRITISH SCHOOL OF ROME.

Besides the catalogue of the Capitoline Museums, of which mention has already been made, the British School can show a long list of excellent work already completed, and much work now being done. In the *Papers of the British School at Rome* there is a good evidence of well-directed industry. Mr. Rushforth's account of Santa Maria Antiqua, Dr. Ashby's important work on the classical topography of the Roman Campagna, and a number of minor papers which fill the first five volumes of that publication, do great credit to the school as a centre of original research.

But the school is gravely handicapped by the want of adequate funds. It has done wonders this year with the limited space at its disposal. Its lectures attracted crowded audiences, drawn largely from the most intellectual circles of Roman society, but their accommodation was not effected without inconvenience. Its growing number of students, while testifying to the recognition of the school's utility, calls for more room for their work, especially in the case of architects. The library, which this year has been rearranged and systematised, is outgrowing its limits. Above all it requires funds in order that it may offer some inducement to post-graduate students who may make it their headquarters for the completion of their studies. Nearly every other nation is represented in Rome by some similar institution; and almost invariably these institutions offer scholarships to a few students, who form the nucleus of their energy. The whole income of the British School at Rome last year, according to the reports, was 1,116*l*., with a further donation of another 116*l*. for the purpose of Mediterranean research. The school at Athens, whose field of work is not nearly so extensive, enjoyed an income of 1,449*l*., with donations for the purpose of excavation amounting to 1,343*l*. The Universities of Oxford and Cambridge should, at least, support Rome as freely as they support Athens. It would be

well, too, if the other Universities of England, and even the Colonial Universities, should turn their serious attention to the claims of the British School at Rome on their liberality. If it is their aim to encourage scholarships, it should surely be worth their while to help in the maintenance of an institution which offers unique opportunities for the making of finished scholars.

Copyright Law: Inclusion of Architecture.

In the House of Commons last Tuesday, Mr. Sydney Buxton's Bill to amend and consolidate the law relating to copyright was read a first time.

The same evening a Parliamentary Paper [Cd. 5272] was issued recording the proceedings and resolutions of the Imperial Copyright Conference which assembled at the Foreign Office on the 18th May under the presidency of Mr. Buxton. Subjoined are resolutions 8 and 9:—

"8. The Conference is of opinion that no formalities, such as registration, should be imposed as a condition of the existence or the exercise of the rights granted by the new Act.

"For the purpose, however, of the protection of an innocent infringer no damages should be recoverable if the infringer proves that he was not aware, and had no reasonable means of making himself aware, that copyright subsisted in the work; but every person would be deemed to be affected with notice of the existence of copyright if the proper particulars have been entered in a register established for the purpose. Registration, however, should be optional merely.

"9. The Conference is of opinion that an original work of art should not lose the protection of artistic copyright solely because it consists of, or is embodied in, a work of architecture or craftsmanship; but that it should be clearly understood that such protection is confined to its artistic form and does not extend to the processes or methods of production, or to an industrial design capable of registration under the law relating to designs and destined to be multiplied by way of manufacture or trade."

Sir Caspar Purdon Clarke, C.I.E. [*F.*], has for reasons of health resigned the Directorship of the New York Museum of Art, to which he was appointed five years ago. The trustees have shown their appreciation of his services by continuing his salary for a year and granting him a pension of £1,000 a year for life.

Mr. Sydney Perks, F.S.A. [*F.*], has been granted the Royal Society of Arts Silver Medal for his Paper on "The Restoration and Recent Discoveries at the Guildhall," read before the Society on the 1st June.

Professor S. D. Adshead [*F.*], of the School of Civic Design, Liverpool University, is on his way to New York to advise on the laying-out of a town on Long Island.

Obituary.

Henry Spalding [*Associate* 1873, *Fellow* 1892] passed away at his residence at Hampstead after a few days illness, on the 25th June, in the seventy-second year of his age. He was articled in 1857 to Messrs. W. G. and M. E. Habershon, of Bloomsbury Square, and commenced practice on his own account soon after the expiration of his articles. He practised for a time in partnership with the late Mr. Patrick Auld; then for ten years till 1899 with Mr. Alfred W. S. Cross; and afterwards with his son, Mr. Reginald H. Spalding [*A.*]. Amongst the many public buildings carried out in conjunction with his partners may be mentioned the Municipal School of Technology, Manchester; Workmen's Dwellings at Manchester; Public Baths at Hampstead, Dulwich, Camberwell, Wandsworth, Westminster, Shoreditch, Coventry; schools at Berkhamsted, Luton, Stockport; the Mount Vernon Hospital, Fitzroy Square; the Village Homes for Boys at Swanley, and additions to the Homes at Farningham; business premises for the London Missionary Society, the London City Mission, the Imperial Tobacco Company, Messrs. John Knight & Co., and many private firms; churches, schools, and institutes at Hampstead, Cricklewood, Harlesden, East Finchley, Barnet, Pinner, Dartford, Hither Green, Walworth, Poplar, Kentish Town; the Y.M.C.A. buildings at Croydon and at Hampstead. He designed many of the larger residences at Hampstead. Mr. Spalding was joint author with Mr. John Honeyman, Mr. W. E. Wallis, and Mr. Owen Fleming of "Working Class Dwellings." In April 1900 he read a paper before the Institute on "The Associated and Self-contained Systems of Block Dwellings" [Journal, 7th April 1900].

John Young, who died on the 15th May last at his residence, Guilford Lodge, Brentwood, was elected *Associate* of the Institute in 1860, *Fellow* in 1892, and was placed on the list of *Retired Fellows* in 1902. Born on the 22nd April 1830, he was educated at University College, London, and served his articles with Lewis Vulliamy. He was afterwards assistant in the office of James Williams, and later to Thomas Henry Wyatt. His practice, commenced in London in the year 1859, was mainly ecclesiastical. Among his earlier works were cemetery chapels and buildings connected therewith at Chatham, Kent; additions to All Saints' Church, Child's Hill; additions to Christ Church, Warley, Essex; Board School, Vange, Essex; Gymnasium, Grammar School, Brentford. He was associated with the late James Brooks in the erection of many churches. Mr. Young enjoyed the friendship of Thackeray, whose acquaintance he made when as a young assistant he was drawing a plan of a house which stood on the site of Dorchester House, Park Lane, the original, with another still existing, of the Marquis of Steyne's mansion in "Vanity Fair."

Matthew Henry Holding, Diocesan Surveyor

of Northampton, who died on the 2nd June in his sixty-fourth year, was elected *Associate* of the Institute in 1881. Mr. Holding learnt building construction under his father, who was a builder, served his architectural pupilage with the late Mr. Buckeridge, and was afterwards assistant in the office of the late G. L. Pearson, R.A. He started practice in his native town of Northampton in 1881. An accomplished artist and an ardent student of archæology, he quickly won for himself a reputation as a church builder and church restorer. Churches in Northampton built from his designs and under his personal supervision included St. Crispin's, St. Mary's, St. Paul's, St. Matthew's, Christ Church, and Holy Trinity. His careful and conserving hand may be seen in the restoration and enlargement of numerous village churches in the neighbourhood of Northampton. His restorations and enlargements in Northampton included St. Edmund's, St. James' and St. Sepulchre's. Works of restoration on an elaborate scale were executed by him at Olney Church, Bucks, Farnborough Church, Hants, and Christ Church, Lichfield. Besides ecclesiastical works in Northampton, he was responsible for the Town Hall extension—a fine treatment of French Gothic, the first part of which was originally designed by the late Mr. Godwin; St. George's Council School, Abington Park Hotel, the Electric Light and Power Station, and many business premises and private houses. His works at a distance include a mansion in Carnarvonshire, Whittington Hall, Staffordshire, Maidwell Hall, House of Refuge, Kelton, Rushden Union Bank, and other buildings. He was surveyor to and laid out with much success the Phippsville and Wantage Estates. He did a vast amount of work in school enlargement and school building in Northampton and neighbourhood. His practice is being continued by his son.

William Banks Gwyther [*Associate* 1886, *Fellow* 1898], chief engineer to the Eastern Bengal and Assam Government, died recently at Shillong. Mr. Gwyther entered the Public Works Department, Bengal, in 1876, from the Thomason Engineering College at Rorkee. In 1896–1900, when Under-Secretary of the Public Works Department, Bengal, he made the plans and designs for the Madrassa Hostel for Boys, a new block of buildings for the Calcutta General Hospital, the chemical department of the Calcutta Medical College, and the new Central Municipal Offices in Calcutta. He was the architect of the scheme of buildings for the Delhi Art Exhibition, 1902. In 1903 he was appointed Chief Engineer, Central Circle, with charge of all the Public Works Department works, as well as Commissioner for the town and city of Calcutta, and member of the Corporation General Committee. He was architect of the Surgical Hospital of the Medical College, Calcutta, the central block and two wings of the General Hospital, Calcutta; the Writers' Buildings, the Military Secretariat and other public offices.

THE JUNE EXAMINATIONS.

The Preliminary.

The Preliminary Examination, qualifying for registration as *Probationer R.I.B.A.*, was held in London and the provincial centres indicated below on the 13th and 14th June. One hundred and seventy-four candidates were admitted, and claims for exemption from sitting were allowed to the number of forty-six. The remaining 128 were examined, with the following results:—

District	Number Examined	Passed	Relegated
London	62	42	20
Birmingham	7	5	2
Bristol	8	7	1
Cardiff	8	4	4
Glasgow	7	6	1
Leeds	8	6	2
Manchester	25	16	9
Newcastle	3	1	2
	128	87	41

The passed candidates, with those exempted—making a total of 133—are as follows:—

ADAMS: Edward; 6 Castle Terrace, Castle Street, Oxford.
ANGUS: Laurence Mortimer; "Ellerdale," Hampstead, N.W.
APPLEBY: Sidney Derrick; 4 Wyresdale Road, Bolton.
ARCHER: Howard Dennet; 59 Oakley Street, Chelsea, S.W.
ASHWORTH: James Rothwell; 2 Broad Oak, Accrington, Lancs.
BAINBRIDGE: George Percival; 89 Ramsden Road, Balham, S.W.
BAMFORD: Albert; Hazel Grove, Hasland, Chesterfield.
BARRY: Caryl Arthur Ransome; Parliament Mansions, Victoria Street, S.W.
BEATH: George Christian; 46 Victoria Street, Aberdeen.
BELFIELD: Eric; Brightlands; Etchingham Park Road, Church End, Finchley.
BENNETT: Thomas Penbertly; 46 Cambridge Avenue, Kilburn, N.W.
BERRY: Harold; "Knebworth," Station Road, New Barnet.
BEVAN: George, Junr.; Bryn Onen, Bridgend, Glam.
BILL: Edward Richard; 7 Preston Street, Abbey Foregate, Shrewsbury.
BOWES: Trevor Straker; 72 Claude Road, Roath, Cardiff.
BRIGDEN: Wilfrid Harcourt; London Road, Sittingbourne.
BROWN: Eric Howard; 12 High Street, Halstead, Essex.
BROWN: Wilfred; Stretton Vicarage, Stafford.
CAVANAGH: Edmund; 2 Selwyn Road, Upton Manor, E.
CAVE: Robert Sims; 8 New Road, Oxford.
CAWKWELL: Robert; 1 Shandon Road, Wincobank, Sheffield.
CHALKLEY: Thomas Henry; 42 Grange Road, Bermondsey, S.E.
CHANDLER: Allen; Bunch Lane House, Haslemere, Surrey.
CHING: William Wilmot Thorne; 17 New Cavendish Street, Portland Place, W.
CHURCH: Leslie Donald Algar; "The Homestead," High Road, Epping, Essex.

CLARKE: Howard Hosegood; 23 Church Hill, Walthamstow, N.E.
CLARKE: Leonard Harris; 38 Dragon Parade, Harrogate, Yorks.
COOK: George Sydney; "Koro Vo," Windsor Road, Baulkham Hills, *via* Parramatta.
COOKE: Richard Thomas; 39 Charles Street, Griffiths Town, near Newport, Mon.
COOKSEY: Harold Thoresby; 266 Upper Street, Islington.
CORNISH: Charles Edwin; Yeo Vale Cottage, Pilton Bridge, Barnstaple.
CRAIG: John Pattison; Norwood, Ulundi Road, Johnstone, near Glasgow.
CRAIK: Fettes Murray; 2 Ethel Terrace, Mount Florida, Glasgow.
CRUMPLER: Arthur Stephen; 5 Stafford Road, Bournemouth.
DARTNALL: James Ambrose; Forest House, High Stone, Wanstead.
DAVIES: Edward Cecil; 22 Lansdowne Road, Bedford.
DAVIES: Hugh Frederic; 41 Liverpool Road, Chester.
DICKINSON: John; Westholme, Bolton-on-Dearne, near Rotherham.
DIPLOCK: Harry Underhill; 185a Latchmere Road, Clapham Junction, S.W.
DIXON: Cyril Burton; Jacobs Hall, Kerboro', Darton, near Barnsley.
DOUGLAS: Andrew; 8 Ormeau Terrace, Woodfield Road, Ayr.
DUBUIS: Louis Gabriel Alfred; 28 Hugh Street, Eccleston Square, S.W.
EDWARDS: John Ralph; c/o Messrs. La Trobe & Weston, 44 Corn Street, Bristol.
EGERTON: Horace Wood; 157 Station Street, Burton-on-Trent.
EVANS: William John; 14 Claremont Road, Irlaws-o'-th'-Height, Manchester.
FISHER: Stanley Howe; "Elmsthorpe," 37 Barrington Road, S.W.
FOOTE: Alexander Allan; H. M. Office of Works, Parliament Square, Edinburgh.
FOSTER: Joseph Ernest; "Bowgreave," Garstang, nr. Preston, Lancs.
FRANCIS: George Eric; St. Stephens, 94 Wiverton Road, Sydenham, S.E.
FROMANT: Edmund George Dawson; Guthrum House, Hadleigh, Suffolk.
FRYER: Cyril Frederick; 20 Grove Park Gardens, Chiswick, W.
FURSE: Ronald Edward; Taunton School, Taunton.
GLASS: Edwin William; 7 Aberlemno Terrace, Dundee.
GORDON: Alexander; Seaview, Prospect Place, Bucksburn, Aberdeenshire.
GRAHAM: Richard David; Northern Bank House, Carrickfergus, Co. Antrim.
GREEN: Frederick Sidney; 33 High Street, King's Heath, Birmingham.
GRIFFIN: Douglas Morley; c/o G. R. Cripps, Esq., Ashley, Prenton Hill, Birkenhead.
HALL: Frederick William George; 68 Trafford Road, Grove Road, Norwich.
HARDING: Herbert John; 16 Balaclava Road, Roath Park, Cardiff.
HARDY: Philip; 5 Baldock Road, Letchworth, Herts.
HARKESS: William; c/o H. P. G. Maule, Esq., 3 Queen Anne's Gardens, Bedford Park, W.
HASELDINE: Cyril Francis William; Aislaby, Attenborough, Nottinghamshire.
HAYNES: Frederick Stanley; Beverley Villa, Harvey Road, Leytonstone.
HENDERSON: Arbor; Arborlea, Strathmartine Road, Downfield, Dundee.
HENDERSON: James Murdoch Dalziel; 1 Holmston Road, Ayr, N.B.
HENDERSON: Robert Coutts; 24 Abergeldie Terrace, Aberdeen, N.B.
HICKMOTT: Herbert Lewis; 50 Codrington Road, Bishopston, Bristol.
HOLT: George Herbert Gordon; 54 Buckingham Road, Brighton.
HUGHES: Thomas William; Bryn Seiriol, Farrar Road, Bangor, N.W.
HUMPHREYS: Reginald; "Hazelhurst," Neath Road, Maesteg, Glam.
HYDE: Arthur James; 7 Addison Terrace, Victoria Park, Manchester.
HYDE: George Henry; 60 Southbank Road, Southport, Lancashire.
JONES: Sidney; 39 Sydney Street, Brynhyfryd, Swansea.
KENWORTHY: Gordon; Pickhill, Uppermill, near Oldham.
KERSEY: Arthur Oliver; Bridge House, Great Bealings, near Woodbridge, Suffolk.
KIRBY: Rufus; Clevedon, Furney Road, Dulwich.
LAMB: Herbert Arthur John; Park House, Tonbridge.
LAWSON: John Boyd; 9 Oakley Street, Chelsea, S.W.
LEES: Albert Edward; 25 Compton Road, Sherwood, Nottingham.
LEYS: Colin Maclaren; Park View, Sands, High Wycombe, Bucks.
LOCKE: Denis Walford; Rosemont, Courtenay Park, Newton Abbot, S. Devon.
LOCKE: William Wellings; 23 Culverden Road, Balham, S.W.
LOVE: Robert Maclaren; Hope House, Barton-on-Humber, Lincolnshire.
MACKAY: Harry; 10 Clonmel Road, Fulham, S.W.
MACPHERSON: John; Marchington, Magdala Road, Nottingham.
McCONNELL: Arthur Percy; "Craigie," Brent Lane, Dartford, Kent.
MERCER: Charles Wilfred; New Road, Llanelly.
MOSS: George James; "Ettare House," Queen's Road, Buckhurst Hill, Essex.
MURRAY: Cyril Aubrey; 3 Belle Vue Road, Sunderland.
NEEDHAM: Alec; 28 Gordon Street, Gainsborough.
NISBET: Alec; 8 Westbank Place, Portobello.
NORRIS: Leslie Archibald; 18 Allfarthing Lane, Wandsworth, S.W.
NUNDI: Rash Behari; 14 St. Mark's Crescent, Regent's Park Road, N.W.
OWEN: Wilfrid Scotter; 5 West End Mansions, West Hampstead, N.W.
PENDEREL-BRODHURST: Bernard Richard; Churchdale House, Harvard Road, Gunnersbury.
PENNINGTON: William Fulton; "Stonedene," Windermere Road, Kendal.
PERRIN: Guy; 20 Tenby Road, Moseley, Birmingham.
PIDSLEY: Wilfrid Gould; The Cedars, St. Thomas, Exeter.
POLLARD: Roy; 69 Avenue Parade, Accrington, Lancs.
PRATT: Neville Herbert; Turret House, Sneinton, Nottingham.
PRESTON: Richard Herbert; Langham House, 147 Church Street, Pendleton, Manchester.
RICHARDSON: Herbert Clifford; St. Austell, Ashton-on-Mersey, Cheshire.
ROBB: James; 26 Pilrig Street, Edinburgh.
ROBERTSON: William Alexander; Balgay Terrace, 160 City Road, Dundee.
RUBERY: Samuel; 49 Lonsdale Road, Wolverhampton.
SAUNDERS: William George; 44 Llangyfelach Road, Brynhyfryd, Swansea.
SCHOFIELD: Riley; 23 Queen Street, West Vale, near Halifax.
SCOLES: Henry Joseph; Shirburn, Torquay, Devonshire.
SHAKESHAFT: Joseph Edward; 13 Wilbraham Road, Chorlton-cum-Hardy, Manchester.

SHENSTONE : Gerald ; " Waveney," 191 Hainault Road, Leytonstone.
SHUFFREY : Gilbert ; " Thorncote," Edgehill Road, Ealing, W.
SIDKI : Mahmond ; Carlton Villa, Anson Road, Victoria Park.
SLATER : Norman Woodford ; Knutton Road, Wolstanton, Staffs.
SMAIL : Herbert Morgan ; Balmyle Road, Broughty Ferry, Scotland.
SPENCER : William Charles ; Tavistock Drive, Mapperley Park, Nottingham.
STONER : Arthur Philip ; 34 Lutterworth Road, Northampton.
STOTT : Alfred Edgar ; 10 Lynwood Road, Rice Lane, Liverpool.
STUTTAFORD : Thomas Pleadwell Cyril ; 12 Woodside, Plymouth.
TANNER : Edgar ; Woodfield, Gravesend.
TERRACE : Thomas Speedie Mitchell ; 30 Quality Street, Dysart, Fife.
TOZER : Frederick Milton ; " San Toy," Bath Road, Maidenhead.
TURNBULL : John ; Alloway Schoolhouse, Ayr, N.B.
VINCENT : Sybil Aimée ; Montrose, Camberley, Surrey.
WALKER : Leonard Harbord ; 140 Holland Road, W.
WALLACE : Robert Stuart ; 18 Marlborough Place, N.W.
WALLIS : Albert George ; 35 High Street, Northwich, Cheshire.
WATSON : Ernest Lancelot ; 26 Holywell Hill, St. Albans.
WATT : John Desborough ; Pentlands, 17 Ramuz Drive, Westcliff-on-Sea, Essex.
WELSH : Stephen ; 16 Yeaman Street, Forfar.
WHITBREAD : Leslie George ; Thompson Cross, Stalybridge.
WHITEHOUSE : Lynn ; 82 Bridge Street, Warrington.
WILLSON : Ernest ; 3 Rutland Road, Southport.
WILSON : Percy ; Stuart Avenue, Hunts Cross, Liverpool.

The Intermediate.

The Intermediate Examination, qualifying for registration as *Student R.I.B.A.*, was held in London and the undermentioned provincial centres on the 13th, 14th, 16th and 17th June. One hundred and thirty-three candidates presented themselves and were examined, with the following results :—

District	Number Examined	Passed	Relegated
London	76	31	45
Bristol	5	1	4
Cardiff	7	2	5
Glasgow	1	1	0
Leeds	16	4	12
Manchester	19	5	14
Newcastle	9	4	5
	133	48	85

The successful candidates, who have been registered as *Students R.I.B.A.*, are as follows, their names being given in order of merit as placed by the Board of Examiners :—

BRITTAN : Harold William [*P.* 1905] ; 146 St. James Road, Croydon.
MOBBS : Hedley Adams [*P.* 1907] ; The Laurels, Oulton, nr. Lowestoft.
MACGREGOR : James [*P.* 1909] ; 14 Viewfield Terrace, Dunfermline.
TOOTHILL : John Cedric Penman [*P.* 1908] ; 2 Park Avenue, Riverdale Road, Sheffield.
HARDMAN : Adrian Thomas [*P.* 1908] ; Northam, nr. Potters Bar, Herts.
CROUCH : Frederick Alfred [*P.* 1908] ; 75 Portland Road, Hove, Brighton.
LOWES : Albert Edward [*P.* 1909] ; 178 Portland Road, Newcastle-upon-Tyne.
THOMS : William George [*P.* 1907] ; 156 Alfreton Road, Nottingham.
SCOTT : Theodore Gilbert [*P.* 1907] ; c/o Mervyn Macartney, Esq., 55 Lincoln's Inn Fields, W.C.
YOUNG : Harold [*P.* 1905] ; Kelvinside, London Road, Portsmouth.
ANDERTON : Richard [*P.* 1906] ; Breeze Hill, Cadley, Preston, Lancashire.
BENNER : Walter [*P.* 1907] ; Radford Baths, Thackery Street, Nottingham.
GIBBS : George Herbert [*P.* 1908] ; 3 Cavendish Road, Westbury-on-Trym, Bristol.
ARCHER : Herbert Humbley [*P.* 1908] ; 78 Otter Street, Derby.
YOUNG : William Cecil [*P.* 1906] ; 19 King's Drive, Heaton Moor, nr. Stockport.
PEASE ; Alex. [*P.* 1909] ; " Selattyn," Kingsland Road, Broadwater, Worthing.
CHARLEWOOD ; George Edward [*P.* 1908] ; 3 Bentinck Terrace, Newcastle-on-Tyne.
LOFTHOUSE : Wallace George [*P.* 1907] ; The Croft, Cartland Road, King's Heath, Birmingham.
PHILLIPS : Arthur Todd [*P.* 1904] ; " Llanoley," Harpenden, Herts.
ELLIS : Thomas Gordon [*P.* 1908] ; 43 Wood Lane, W.
FINCHAM : Edward [*P.* 1908] ; The Green, Marks Tey, Colchester.
BHEDVAR : Sohrab Keikhosru [*P.* 1909] ; " The Ferns," 104 Manor Park, Lee, S.E.
BAKER : Harold [*P.* 1907] ; The Dell, Serpentine Road, Selly Hill, Birmingham.
MOORE : Frederick William [*P.* 1905] ; Riddlesden, Keighley.
RATCLIFF : Fred [*P.* 1909] ; 52 Springvale Road, Sheffield.
RUSSELL : Andrew Lawrence Noel [*P.* 1909] ; 7 Fynes Street, Vincent Square, S.W.
BACON : George Whitaker [*P.* 1906] ; " Pembury," Western Park, Thames Ditton.
BATTY : William Arnold [*P.* 1905] ; 37 Queen's Gate Street, Hull.
BETTS : William Stanley [*P.* 1905] ; 10 Thirsk Road, Lavender Hill, S.W.
CHESTON : John Allford [*P.* 1907] ; 36 Bloomsbury Square, W.C.
COLE : Leopold Edmund [*P.* 1907] ; 113 Constantine Road, Hampstead, N.W.
DAILEY ; Arthur Benjamin [*P.* 1906] ; 89 Larkhall Rise, Clapham, S.W.
DEARDEN : Henry, junr. [*P.* 1907] ; 2 Warriner Gardens, Battersea Park.
EDGE : Walter Frederic [*P.* 1906] ; Clenthyrst, Meadow Road, Edgbaston, Birmingham.
GLOVER : Kenneth [*P.* 1905] ; 4 Philbeach Gardens, Earl's Court, S.W.
HEAL : Albert Victor [*P.* 1908] ; Hawthorne Dene, Hills Road, Cambridge.
HUGHES : Basil [*P.* 1909] ; The Conifers, Woldingham, Surrey.
INGHAM : Walter [*P.* 1907] ; 83 Howe Street, Derby.
MAYHEW : Alfred Ernest [*P.* 1907] ; 20 Gladsmuir Road, Highgate, N.
McLACHLAN : Charles [*P.* 1906] ; 23 Clarendon Road, Lewisham, S.E.
MILBURN : Stanley Wayman [*P.* 1904] ; 8 Thornhill Park, Sunderland.
OATES : Walter [*P.* 1906] ; Holme Royd, Lightcliffe, nr. Halifax.

PERRY: Harold Charles [*P.* 1905]; Rockside, 153 Richmond Park Road, Bournemouth.
PRATTEN: Alfred [*P.* 1906]; 18 Brunswick Street, Swansea.
SHERWIN: Cecil Thomas [*P.* 1906]; Westbrook, Lichfield Road, Stafford.
TAYLOR: Herbert Samuel [*P.* 1907]; 109 Victoria Road, Kilburn, N.W.
THOMAS: Edward John [*P.* 1905]; Gwerna House, Maesycwinmer, nr. Cardiff.
WILLIAMS: Stanley Hurst [*P.* 1907]; Westholme, Clarkehouse Road, Sheffield.

Exemptions from the Intermediate Examination.

The following Probationers, possessing the qualifications required by the regulations, have been exempted by the Council from sitting for the Intermediate Examination and have been admitted as *Students R.I.B.A.*:—

ANGUS: Laurence Mortimer [*P.* 1910]; Ellerdale, Hampstead, N.W. [Manchester University.]
OWEN: Wilfrid Scotter [*P.* 1910]; 5 West End Mansions, West Hampstead, N.W. [Manchester University.]

The Final and Special.

The Final and Special Examinations were held in London from the 23rd June to the 1st July. Of the 123 candidates examined, 54 passed, and 69 were relegated in various subjects. The following are the names and addresses of the passed candidates, the † prefixed to a name signifying that the candidate entered for the Special Examination, which is designed for architects in practice and chief assistants exempted by the Council from the Preliminary and Intermediate Examinations and from submitting Testimonies of Study:—

†ARMSTRONG: Colvin Tyler [Special Examination]; 32 Charing Cross, Whitehall, S.W.
AYRE: David Wickham [*P.* 1905, *S.* 1906]; 71 Patrick Street, Cork, Ireland.
†BAYLEY: Benjamin Charles Ernest [Special Examination]; 108 Beverstone Road, Thornton Heath, Surrey.
BEARE: Josias Crocker [*P.* 1900, *S.* 1906]; 68b Queen Street, Newton Abbot.
BROCK: Alan St. Hill [*P.* 1905, *S.* 1906]; "Haredon," N. Cheam, Sutton, Surrey.
BULMER: Francis Holles [*P.* 1902, *S.* 1904]; 15 Alderbrook Road, Balham, S.W.
†CALDER: James Muir [Special Examination]; 169 Edmund Street West, Rochdale.
CATT: Alfred Edward [*P.* 1897, *S.* 1905]; 37 Hardman Road, Kingston-upon-Thames, Surrey.
CHETWOOD: Henry John [*P.* 1902, *S.* 1909]; Waltham Abbey, Essex.
CORNWELL: Arthur Redfern [*P.* 1903, *S.* 1907]; 119 Adelaide Road, Hampstead, N.W.
COWPER: James Bertie Francis [*P.* 1906, *S.* 1907]; 73 High Street, C.-on-M., Manchester.
COX: Herbert [*P.* 1907, *S.* 1907]; 144 Fellows Road, South Hampstead, N.W.
ELKINGTON: Hylton Basil [*P.* 1903, *S.* 1906]; Norfolk House, 7 Laurence Pountney Hill, E.C.
FIDDAMAN: William Alfred Masters [*P.* 1903, *S.* 1906]; 17 South Norwood Hill, S.E.
GRANT: Thomas Francis Wiltshire [*P.* 1902, *S.* 1907]; "Aberdeen," South End Road, Hampstead, N.W.
GRAY: James Henry [*P.* 1905, *S.* 1907]; 10 Hammersmith Terrace, W.
†GUMMER: William Henry [Special Examination]; 36 Cartwright Gardens, W.C.
GUNTON: William Henry [*P.* 1909, *S.* 1909]; "Balvenie," Orchard Road, Bromley, Kent.
HALL: Alner Wilson [*P.* 1900, *S.* 1905]; Crowhurst, 20 Woodville Gardens, Ealing.
HAMPSON: Joseph Louis [*P.* 1899, *S.* 1906]; 360 St. Helen's Road, Bolton.
HEAVEN: Frank Henry [*P.* 1907, *S.* 1908]; 5 Rock Street, Aberkenfig, Bridgend, Glam.
HENNELL: Sidney Thorn [*P.* 1900, *S.* 1904]; 16 Earlsfield Road, Wandsworth Common, S.W.
HILL: Samuel Woods [*P.* 1901, *S.* 1903]; 8 Clifford's Inn, Temple Bar, E.C.
HOLLINS: George, junr. [*P.* 1903, *S.* 1906]; 4 Market Place, Newcastle, Staffs.
HOOPER: Harold Ridley [*P.* 1905, *S.* 1907]; Bury Lodge, St. Edmunds Road, Ipswich.
HOYLE: Wilfred [*P.* 1904, *S.* 1907]; 24 Park Place, Gravesend, Kent.
†HUDDART: Richard Melvil Fane [Special Examination], 17 St. Mary Abbott's Terrace, W.
JAQUES: Richard [*P.* 1904, *S.* 1907]; "The Woodlands," Harrogate.
KEIR: William Ingram [*P.* 1902, *S.* 1905]; Ingram House, Stockwell, S.W.
†KENNARD: John Harold [Special Examination]; 2 Verulam Buildings, Gray's Inn, W.C.
LEIGH: Douglas Chantler [*P.* 1905, *S.* 1905]; West Home, Weaverham, Cheshire.
LIVOCK: Stanley Gage [*P.* 1903, *S.* 1908]; 3 Portsea Place, Hyde Park, W.
LYNHAM: Arthur George [*P.* 1901, *S.* 1904]; 80 Birchfield Road, Northampton.
MAUFE: Edward Brantwood, B.A. Oxon. [*P.* 1899, *S.* 1903]; 23 Old Buildings, Lincoln's Inn, W.C.
MULREADY: Paul William [*P.* 1901, *S.* 1907]; 3 Victoria Street, Westminster, S.W.
NEWNUM: Eric George [*P.* 1907, *S.* 1908]; 19 Nottingham Place, W.
OLIVER: Basil [*P.* 1900, *S.* 1902]; 7 Southampton Street, Bloomsbury Square, W.C.
REIS: Victor Cinatti Batallia [*S.* 1908]; 23 Dartmouth Park Road, Highgate Road, N.W.
RHODES: Thomas Herbert [*P.* 1900, *S.* 1904]; Eamont, Highfields, Northwood, Middlesex.
ROBSON: Bernard [*P.* 1904, *S.* 1906]; c/o Messrs. Essex & Goodman, 21 Waterloo Street, Birmingham.
ROWSE: Herbert James [*P.* 1906, *S.* 1907]; Oakdene, Moor Lane, Great Crosby, Liverpool.
SAVAGE: Hubert [*P.* 1900, *S.* 1906]; Elgin, Haydon Road, Bushey, Herts.
SHINER: Lawrence Alexander David [*P.* 1902, *S.* 1906]; 130 Jermyn Street, Haymarket, W.
SMITH: Hubert Niemann [*P.* 1903, *S.* 1905]; Clevedon, Lewisham Hill, S.E.
†SNOW: Alan Leslie [Special Examination]; 13 Ovington Gardens, S.W.
STUBBS: Edward Woodhouse [*P.* 1905, *S.* 1907]; Grayshott, Marlborough Road, South Croydon.
SWAN: Thomas Aikman [*P.* 1902, *S.* 1908]; 28 Gayfield Square, Edinburgh.
†TOPLEY: Samuel Douglas [Special Examination]; 6 Cheapside, E.C.
TURNER: Horace George [*P.* 1901, *S.* 1907]; Springfield, Sandfield Road, Thornton Heath, Surrey.
WALL: Roland Leslie [*P.* 1906, *S.* 1907]; Fieldside, Beddington Lane, Surrey.
WEBSTER: Frank Coutts [*P.* 1904, *S.* 1905]; 39 Ainger Road, Primrose Hill, N.W.
WILSON: Geoffrey Cecil [*P.* 1903, *S.* 1908]; 45 High Road, Streatham, S.W.
WILSON: Ralph [*P.* 1904, *S.* 1906]; 47 Glenhouse Road, Eltham, Kent.
WOODS: Frank [*P.* 1902, *S.* 1905]; Shoppenhangers, Maidenhead.

The following table shows the number of failures in each subject of the Final Examination :—

I. Design	48
II. The Principles of Architecture	53
III. Building Materials	18
IV. Principles of Hygiene	23
V. Specifications	22
VI. Construction, *Foundations*, &c.	30
VII. Construction, *Iron and Steel*, &c.	27

Colonial Examinations : Special.

The following have passed the Special Colonial Examination qualifying for candidature as *Associate R.I.B.A.* held in Toronto and Johannesburg respectively in November last :—

CANFIN : Arthur N., 114 Sherbrooke Street, West Montreal, Canada.

DOWSWELL : Harry Royden, B.A., 4355 Montrose Avenue, Westmount, Quebec, Canada.

MONSBOURGH : Allan Gordon, 47 Op de Bergen, Troyeville, Johannesburg, S. Africa.

Colonial Examinations : Intermediate.

The following have passed the Intermediate Examination held in Sydney, New South Wales, in November 1909, and have been registered as *Students R.I.B.A.* :—

BODDINGTON : Frederick Eckersley, c/o C. W. Chambers, Esq., Queen Street, Brisbane, Queensland.

COOK : George Sydney, Koro Vo, Windsor Road, Baulkham Hills, via Parramatta.

Election of Licentiates R.I.B.A.

The following have been elected Licentiates of the Institute in accordance with By-law 12 :—

[*Elected 4th July.*]

ABERCROMBIE, Balfour (Glasgow).
ADKINS, John Standen.
ALLEN, Percy King (Tunbridge Wells).
BAARS, Francis Van.
BAINES, Charlie Owen (Paignton).
BAKER, Thomas Henry (Colchester).
BARKER, Thomas Christopher (Scarborough).
BELL, Frank (Manchester).
BELL, James Frederick Carruthers.
BEVAN, Thomas Morgan (Derbyshire).
BIRD, Hugo Ritchie (Brentwood).
BIRKS, Ellis Rawson (Sheffield).
BOWLEY, John (Hastings).
BULL, Walter William.
BUNGARD, Arthur William.
CARRINGTON, Arthur John Pearson.
CHAUSSÉ, Alcide (Montreal, Canada).
CONSTANDUROS, Stephanos.
CORDERY, Harold (Manchester).
DENINGTON, Joseph William.
DEXTER, Sothern.
EWING, Charles Turnbull (Crieff, N.B.).
FINLAYSON, William (Crieff, N.B.).
FORBES, James Edwin.
GEORGE, William Henry (Ashton-under-Lyne).
GRIMWOOD, George Francis (Monmouth).
HALLEY, James Mitchell White.
HANDS, Horace Ireton (Birmingham).
HEWITT, Thomas Francis (Lincoln).
HICK, Edwin Morcombe.
HUNTER, David Henry (Glasgow).
ISAACS, Charles Henry.
JACQUES, John Henry.
JAMES, John Alfred (Port Talbot).
JENKINS, Thomas, J.P. (Burton-on-Trent).
JUPP, Sydney.
KING, Charles.
LACY, George John Joseph.
LANDSTEIN, Arthur (Liverpool).
MARTINSON, Matthew George (Newcastle).
MENNIE, Harvey (Aberdeen).
MITCHELL, John Galt (Edinburgh).
MORGAN, Thomas James.
MORRISH, William James Marmaduke (Dorset).
MOSCROP-YOUNG, Frederick Charles.
NEILL, James (Leeds).
OGDEN, Ernest (Manchester).
PARR, Samuel George, F.S.I.
PAYNE, James Alfred.
PERCIVAL, Ernest Llewellyn (Birmingham).
POULTER, Harry Reginald (Camberley).
POVEY, George (Birmingham).
RALPH, Ernest Wyatt (Wigan).
RANGELEY, Alfred (Manchester).
RICHARDS, Sydenham W.
SATTIN, Benjamin.
SHADBOLT, Blunden (Horley).
SHANKS, John (Kirkintilloch, N.B.).
SIMPSON, Lewis William.
SPENCER, Renfrew (Nottingham).
STEDMAN, Arthur John (Farnham).
STEEL, John (Wishaw, N.B.).
STODDART, Donald McKay (Glasgow).
TATE, John Duncan.
THOMAS, Albert John.
WALFORD, Henry Hugh.
WALKER, Samuel George (Nottingham).
WEST, Daniel.
WHITE, Frederick.
WILKINS, Edward.
WONNACOTT, Howard John, P.A.S.I.
WRENCH, Francis Houlton, Assoc.M.Inst.C.E. (Sheffield).
WRIGHT, Gordon Lorimer (Edinburgh).
YOUNGMAN, Lionel Stanley (Bournemouth).

[*Elected 18th July.*]

ALDER, Cecil (Johannesburg).
BAKER, Fred (Lincoln).
BAKER, Howard Leslie.
BALLARD, William Joseph (Birmingham).
BARKER, Roger Bradley (Arnside, Westmorland).
BETTS, William Vallance (Nottingham).
BOYD, James Stirling (Glasgow).
COPESTICK, George Christopher (Derby).
ELWIG, Henry, jun. (Tunbridge Wells).
HAMMOND, Frederic Snowden.
HARDING, Joseph William Berry (Liverpool).
HENDERSON, John Edward.
HOBSON, Frederick James (Rawtenstall, Lancs.).
HOUSTON, John Alfred Taylor (Glasgow).
HUTCHINS, George (Chester).
JACKSON, Martin Thomas Ernest.
MARTIN, Thomas (Coatbridge, N.B.).
MASSEY, Izmay (Plymouth).
MAYELL, Alfred Young.
PEARSON, Albert Emanuel (Cheltenham).
PICKFORD, Charles.
POOLE, William Harold (Maidstone).
PRESTON, Archibald Frederick.
RIMMINGTON, Frank Harrington Chas. (Liverpool).
STEBBING, William Pinchard Delane.
STOKES, Albert Perkins.
STOUT, Joseph Ernest (South Shields).
WHITE, Frank Rice (Basingstoke).
WOODS, Walter Harry (Long Eaton, Derby).

LEGAL.

Architects' Fees: Contract not under Seal.

HODGE v. URBAN DISTRICT COUNCIL OF MATLOCK BATH AND SCARTHIN NICK AND NUTTALL.

This was an action for wrongful dismissal, tried before Mr. Justice A. T. Lawrence in the King's Bench Division on the 16th July, and reported in *The Times* of the 18th.

It appeared that at a meeting of the defendant Council, at which the plaintiff was present, they passed a verbal resolution that the plaintiff and one Nuttall should be employed as joint architects for the erection of a kursaal, and that the plaintiff prepared plans and for some time did work in pursuance of the resolution. Before the work was finished the plaintiff was dismissed. He brought an action, which was heard at Derby Assizes, and in which the jury found a verdict in his favour, after answering a number of questions specifically left to them. The principal defence raised in that action was that in any case the plaintiff could recover nothing, as the contract under which he had been employed had not borne the Council's seal; and the case now came on in London for further consideration of the point of law.

Mr. Shearman, K.C., and Mr. Grimwood Mears appeared for the plaintiff; and Mr. Hugo Young, K.C., and Mr. Sandlands for the defendants. The following cases were cited:—*Lawford* v. *Billericay Rural District Council* (1903, 1 K.B. 772); *Young* v. *Leamington Spa Corporation* (8 App. Cas., 517); *Bourne and Hollingsworth* v. *Marylebone* (24 *Times* Law Rep. 322); *Clarke* v. *Cuckfield Union* (21 L.J., Q.B., 349); *Hunt* v. *Wimbledon Local Board* (4 C. P. D., 48); *Start* v. *West Mersea School Board* (15 *Times* Law Rep. 442). Counsel's arguments are reported in *The Times* of the 18th July.

Mr. Justice Lawrence, in delivering judgment, said that as the resolution employing the plaintiff was not under seal the plaintiff could not succeed in an action directly based on it for breach of contract or wrongful dismissal. It was, however, said that as the defendants had had the benefit of his work he could recover on a *quantum meruit* the sum of £230, which the jury had found he would be entitled to. This contention was in his opinion right. *Lawford* v. *Billericay Rural District Council* (1903, 1 K.B. 772) applied to corporations the law applicable to other persons, that they could not take the benefit of work, in an employment within the scope of their authority and for the purposes for which they were created, and refuse to pay for it. The words "purposes for which they were created" must mean any purposes which were within their powers. Here the benefit had been received not only by the Council, but also by the individual inhabitants of the district. So there must be judgment for the plaintiff for £230, and costs except as to the issue whether the contract was under seal.

Stay of execution was applied for and granted except as to a sum of £100 to be paid to the plaintiff.

Fire Protection in London Hotel: Fire Screens.

Publication is requested of the following letter addressed to the Secretary:—

13 *Southampton Street, Strand, W.C.:*
29th June 1910.

BERNERS HOTEL, BERNERS STREET.

DEAR SIR,—In the last issue of the JOURNAL of the Institute there is a report, under the head of "Legal," of the appeal under the London Building Acts (Amendment) Act 1905, against the refusal by the London County Council to issue a certificate in connection with this hotel, on the ground that screens had not been provided around the staircases to prevent, as far as possible, risk of death from fire and smoke.

In this report the evidence of Mr. John Slater, the architect of the Berners Hotel, and Mr. Fredk. Izant, surveyor to the Phœnix Assurance Company, is referred to; but not a word is said as to the evidence, on the other side, of Mr. Stransom, representing the London County Council; Mr. W. J. Ancell, the architect of the Strand Palace Hotel, erected for Messrs. J. Lyons & Co., and the architect of other hotels and buildings, nor of the evidence I myself gave as architect to the Piccadilly Hotel.

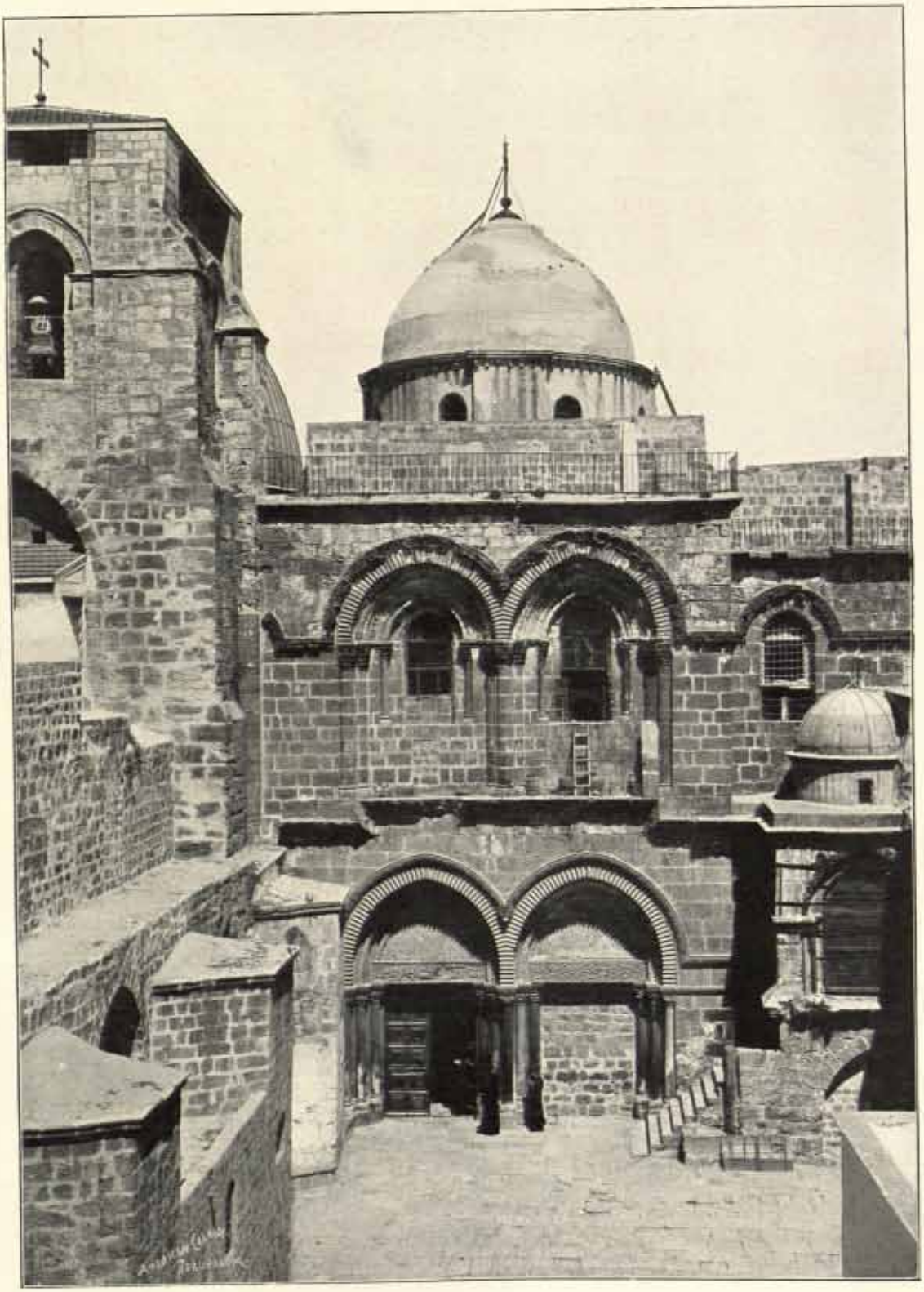
Mr. Stransom, Mr. Ancell, and myself were conclusive on the point that these screens were, in this particular case, necessary for the protection of the inmates from risk of death from fire and smoke. I stated before the Tribunal that I had put up these screens in front of every staircase throughout the Piccadilly Hotel, and that I had not found them inconvenient as regards the service, nor had they interfered with the light to the staircase, nor were they objectionable in any other way.

You must pardon me remarking that I think when a report appears in the JOURNAL of the Institute on so important a subject as these screens the evidence on both sides should be reported, or it would be better that a report should not appear at all.

The report I refer to gives an entirely erroneous impression of the facts, and I should be much obliged if you would publish this letter so that some better idea of the case may be gathered by those who only obtain their information from the JOURNAL of the Institute.—I am, yours faithfully,

WM. WOODWARD.

[*** The issue of the 25th ult. was already due at press when the result of this appeal became known, but as the matter had some special interest for members it was considered desirable to include a few notes of the case, rather with the object of recording the decision than of reporting the proceedings. The hearing had occupied the Tribunal three days, and even a *précis* of the evidence would have run into a great deal more space than could be contrived in the time at disposal. The points that seemed essential to note for the immediate purpose were the facts of the case, the grounds of the appeal, and the judgment. These it was stated in the opening paragraph were "extracted from *The Times* reports of the 1st, 10th, and 24th June." Members in possession of the JOURNAL note and wanting fuller details would, presumably, refer to those reports. The statements quoted of the surveyor to the Phœnix Office were not of an *ex parte* character, but were statements of actual fact with regard to the building in dispute which it seemed material to note.—For the further information of members interested in this case reference is given to *The Builder* of the 18th June as containing a fuller report of the evidence than *The Times*.—EDITOR.]



CHURCH OF THE HOLY SEPULCHRE: SOUTH TRANSEPT.

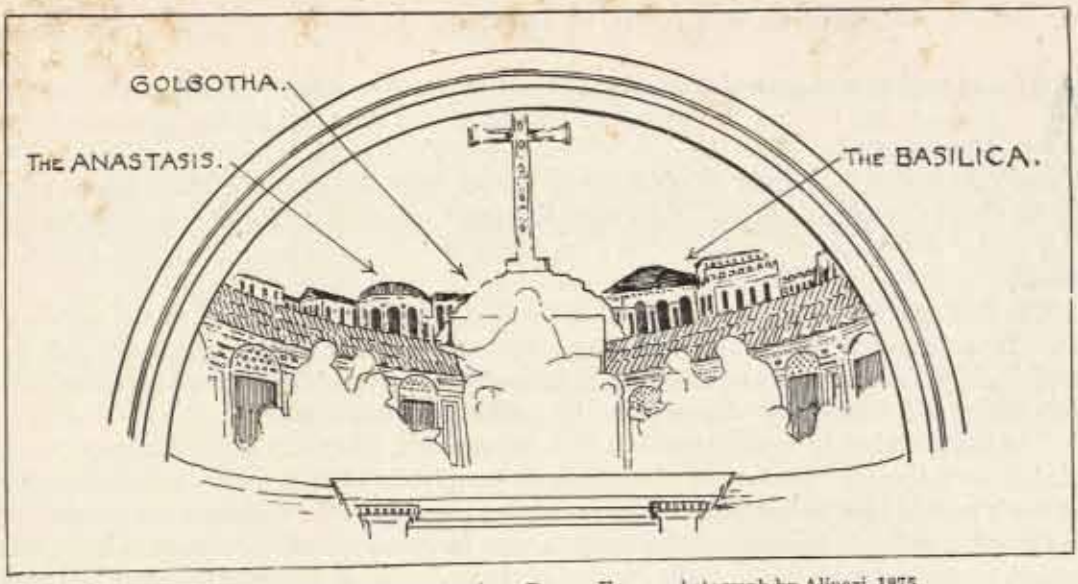


FIG. 1.—Apse Mosaic in St. Pudenziana, Rome From a photograph by Alinari 1875

THE CHURCH OF THE HOLY SEPULCHRE, JERUSALEM.—I.

By GEO. JEFFERY, Curator of Ancient Monuments, Cyprus.

HISTORY.

EXTRACTS FROM A DIARY.

"On my first visit to Jerusalem in 1891, I made the acquaintance of the late Herr Schick, who at that time occupied the post of consulting engineer to the town council (medjlis) of the city. I found him very willing to impart much valuable information on the Church of the Holy Sepulchre and its remarkable surroundings. His studies had, however, been diverted in later years from a serious investigation of the greatest of Christian memorials into more abstruse speculations (then popular with many visitors) about the remote history of the Holy Land. Herr Schick's knowledge of the area surrounding the Holy Sepulchre was most extensive, and the information which he volunteered to a visitor like myself was quite unbiassed by foregone speculations.

"M. and Mme. Khitrovo, with whom I had the pleasure of passing some months, enjoying the hospitality of the Russian Palestine Society, offered me a very great deal of interesting information on the subject of mediæval Jerusalem. The Russian Palestine Society had but recently made their great discoveries about the remains of the fourth-century basilica, and the new hospice on its site was only just completed. M. Khitrovo was paying a visit to Jerusalem on this account, and consequently we had frequent opportunities of studying the matter together. I made a series of detail drawings of the remains within the new hospice, which were published in the Bulletin of the Society in 1896, but, unfortunately, not lithographed direct from my drawings.

"During my stay in Jerusalem I also made a series of plans of the Holy Sepulchre buildings, as I conceived them to have existed, with various modifications at different periods. I was induced to do this from observing how very erroneous De Vogüé and other authors seemed to be in their identifications and attempted reconstructions. These studies I had printed in 50 copies for private circulation, one of which I presented to my friend Mr. Arthur Headlam, who wrote an elaborate and appreciative criticism on the drawings in the *Quarterly Review* for 1899. Mr. Headlam's own contributions to the study of Byzantine history and art entitle him to form an excellent opinion on my somewhat slender attempt to elucidate the architectural history of the site.

"I feel impelled to record my impressions of the present condition of the Holy Sepulchre buildings, because it appears to me as if many changes are imminent in its surroundings, and the recent rebuildings of adjacent properties are already beginning to alter very much its associations. The replacement of the venerable ruins of St. John's Hospital by a fantastic modern bazaar and a modern Lutheran establishment, as next-door neighbours of the famous shrine, suggests that before long the very structure of the Sepulchre church itself may be interfered with. The remaining portions of the Gothic church, spared by the great fire of 1808, are in these days much decayed, and perhaps invite the insatiable appetite of the 'restorer'; it is perhaps remarkable that they have escaped restoration until the present day.

"The portions of the monument and its surroundings which still survive in an interesting manner from a period before I visited the Holy Sites for the first time (1891) are still very extensive, but all the properties on the southern side have been rebuilt, with the exception of the small and insignificant 'Convent of Gethsemane.' The properties on the eastern side are now (1909) in process of reconstruction. On the northern side a new 'Convent of Karalambos' has been erected, and some slight alterations to the mass of buildings surrounding it have taken place." G. J., 1910.

AS far as we know at present, Eusebius, Bishop of Cæsarea, who flourished in the early part of the fourth century, is the first writer who gives a clear and intelligible account of the Holy Sepulchre after the events recorded in the Gospel. It is to be hoped that in the new discoveries constantly being made in Egypt, some references in Christian documents may be found throwing additional light upon this most interesting subject; nothing, however, of an earlier date than the middle of the fourth century seems to have been found up to the present.

The finding of the Holy Sepulchre is described by the Bishop of Cæsarea as a simple operation. We are given to understand that the site was well known, and the presence of the pagan temple built to desecrate it was sufficient to indicate its exact position. Eusebius seems to have been present at its discovery when a boy; he speaks as an eye-witness.

The temple, already venerable after, as it is supposed, 200 years of heathen use, was first pulled down; then the podium or platform was completely cleared away, and the materials and earth carried to a considerable distance, adding possibly to the enormous accumulations in the Tyropeon valley. Roman temples in Syria were frequently erected on more or less artificial mounds, as, for instance, Baalbek, the greatest of them all. The Holy Sepulchre when laid bare by the removal of the temple podium seems to have astonished the explorers by its intact condition.

The tendency of the historians of the early Christian Church is to magnify the position of Christianity at its first recognition by the Roman Government. It is not perhaps sufficiently recognised that, although Constantine seems to have personally and privately favoured Christianity, and the famous Edict of Milan removed all restrictions as to its development, the Roman Imperial Government remained officially heathen until the time of Theodosius at the close of the fourth century, when the Olympian Games were abolished and the central shrine of the State religion, the Temple of Vesta in the Roman Forum, was officially closed [394]. Christianity was viewed by Constantine's Government much in the way that it is viewed by the Turkish Government of the present day, and tolerated for similar reasons. Christ occupied a place in the Roman Pantheon long before the middle of the fourth century, and even Antoninus Pius, one of the builders of Baalbek, severely repressed anti-Christian riots. But Constantine went a step farther than any of his predecessors in that he permitted the destruction of a temple of the Imperial State religion for the purpose of substituting the central shrine of Christendom—the Monument of the Resurrection. It is the first instance of the kind on record.

The exact dates of the destruction of the temple and the building of the Christian church are unknown. Eusebius is supposed to have witnessed the first when a boy, and to have been present at the consecration of the latter in his capacity as bishop of the region. Some little time must therefore have elapsed between the two events, and the legendary account generally gives the period of transformation as 326–335. In the year 333 the new buildings seem, however, to have been seen in an unfinished condition by the Bordeaux Pilgrim.

Descriptio fabricæ Sancti Sepulchri.

"The Holy Sepulchre—this, as the chief part of the whole monument, the Emperor caused to be decorated with the greatest care, and with magnificent columns. Outside was a vast court, open to the sky, paved with polished stone, and with long porticoes on three of its sides Towards the east, opposite the Tomb, was joined a Basilica, an admirable work of immense proportions. Its walls were encrusted with vari-coloured marbles, whilst its exterior was built of polished stonework little inferior to the marble in beauty. The roof was constructed with a lead covering impervious to winter weather, and on the inside it presented a vast surface of gilded coffers. At both sides of the Basilica were two-storied aisles, with gilded ceilings divided from the nave by colonnades.

"Outside the Basilica, on its front, were enormous columns, and three doors opening towards the east as a public entrance. Opposite these doors was the apse * or principal part of the church. This apse was enclosed

* *Hemispherium*: this possibly means the Anastasis, and not the western apse of the Basilica.

or decorated with twelve columns to symbolise the Apostles, and on each column was a silver vase, the special gift of the Emperor.

"In front of the church was an open space with porticoes on either hand, and also gates into the Atrium. This grand entrance to the Basilica stood in the midst of the market-place; and its gates of beautiful workmanship afforded a view of the interior to the passer-by, who could not but be filled with astonishment."—*Eusebius Pamphili*, "De Vita Constantini." Migne, *Pat. Gr.* t. xx.—supposed date of writing, A.D. 335.

The meagre account of Jerusalem by the first Christian pilgrim known to have recorded his travels [the Bordeaux Pilgrim] confirms the statements of the Bishop of Cæsarea. He seems to have been attracted on his arrival in Jerusalem by the sight of the Acropolis [modern Haram], with its Roman temple and other buildings, and its statues still standing of Hadrian. He then mentions the Domus Caiaphæ on Zion, which would appear to have been the great Christian hospice of the period as well as *Mater omnium ecclesiarum*, a title afterwards transferred to the church of the Cenaculum. Lastly, he describes the New Buildings on the Holy Sites, and makes the first recorded mention of the *Monticulus Golgotha*. He speaks of passing through the wall of Zion by the gate of the New City, which may mean either a new district rising round the Holy Sites, or from its facing Neapolis [Nablus]. On the right hand he observed the ruins of the Prætorium, on the left were Golgotha and the Sepulchre.

After an interval of fifty years another native of France followed in the footsteps of the Bordeaux Pilgrim. This was Silvia of Aquitaine, whose account of her travels, discovered accidentally at Arezzo in 1887, is as tediously voluminous as the Bordeaux Pilgrim's tale is short and meagre. Silvia seems to have visited the Holy City during A.D. 380–385, when Cyril, the author of the "Catechetical Discourses," was Bishop of Jerusalem.* She does not mention him by name, but he doubtless was the bishop whose ritual and ministrations she watched with so much care. The *Peregrinatio* takes the form of a letter addressed to certain ladies, possibly the sisters of some convent in Aquitaine. The first few pages, a fragment in the centre, and the conclusion are missing, but the greater part of the description of the Holy Sites is fortunately intact.

At the date of Silvia's visit the buildings were in their pristine condition as planned by their first builders. The Anastasis [Tomb-enclosure] is unfortunately not described in detail, but its doors [or the doors of the Tomb itself] are mentioned, outside which the catechumens stood, whilst the faithful entered within. On several occasions the Anastasis is spoken of as a "Church," and the sound of the voices of those offering praises within it, heard outside, is noted.

Silvia's descriptions of her religious life in Jerusalem are vivid and full of interesting particulars, which may be epitomised as follows. After a service of prayer in the Anastasis, the pilgrims were conducted by the Bishop [who seems to have played a very active part in the ceremonies] to the "Cross," whilst interminable kyries were sung and benedictions performed. This Cross, covered with jewels and gilding, stood on the "Monticulus Golgotha." The seat of the Bishop was placed in different positions around the hillock during these ceremonies,† and the open space of Golgotha is described as decorated with innumerable lamps and lighted candles, hanging presumably within the surrounding colonnades, as we see them, for instance, represented in the mosaics of Thessalonica. This illumination of Golgotha was specially important at the *Licinicon* or *Lucernarum* festival, but whether before cockcrow in the morning or at evensong these illuminations of the colonnades seem to have been very noticeable.

Silvia is probably the first person to mention the veneration of the relics of the "True Cross," which she describes as taking place on a table covered with a linen cloth arranged at the side

* The Bishops of Ælia Capitolina were dependent on the Bishopric of Cæsarea until A.D. 451, when the Council of Chalcedon made Jerusalem the Fifth Patriarchate.

† "Though I should deny the Crucifixion, this Golgotha confutes me near which we are now assembled" (St. Cyril, Lect. XIII. 4 [*c.* A.D. 350], Newman's translation).

of Golgotha. During all the ceremonies connected with Golgotha, the Bishop is always mentioned as assisting "in cathedra." She then gives picturesque details of the pilgrims' visit to *Imbomon*, or the scene of the Ascension on the Mount of Olives: the return to Jerusalem after a night spent on Olivet; *candelæ ecclesiasticæ* or candle lamps throwing a weird light on the crowd of men, women, and children carrying palms and olive branches and singing hymns, the little ones overcome with fatigue being carried on men's shoulders, and the noise of the returning multitude ever increasing to those who lay awake in Jerusalem. Then arriving at the city gate "at that hour when one man can distinguish another," the Bishop leading the way into the Basilica, the great eastern doors were thrown wide open for the entering crowd.

On other occasions Silvia mentions the Bishop examining the candidates for baptism. The Bishop's *Cathedra* was placed behind the great altar in the apse of the Basilica, and the neophytes were conducted to him one by one. No mention, however, is made of the Baptistery which fifty years before had attracted the notice of the Bordeaux Pilgrim.

Cyril, Bishop of Jerusalem in the concluding years of the fourth century, has left sermons [we can almost fancy Silvia may have heard them] which contain interesting details about the Holy Sepulchre. He mentions the great modifications the Tomb had undergone more than fifty years previously when the Anastasis was erected. The monument had been reduced to a mere rock-covering of the sepulchral chamber, and the outer or entrance part of the cave [such as is usually found in tombs near Jerusalem] was hewn away for the general adornment. He mentions this fact in several parts of his lectures. Here it is interesting to remark that in the very wonderful reproduction of the Holy Sepulchre at Bologna [possibly fifth century in origin] it is represented without any outer chamber. Another curious detail mentioned by Cyril would imply the roofless state of the Anastasis. He speaks of the evidences then remaining of a garden surrounding the Tomb, as if it had been treated as a rock-hewn monument like those of Petra, or the well-known "Absalom's Pillar" in the Valley of Jehoshaphat with somewhat natural surroundings.

A great deal of interest attaches to the few contemporary representations of the Holy Sites in the fourth century which have been identified up to the present. The most important is the apse mosaic in the Church of St. Pudenziana, Rome, which the present writer was the first to bring into public notice for this purpose [fig. 1, p. 709]. Very careful drawings of this most interesting work of art were made by the late Cav. De Rossi. He has given an elaborate sectional diagram in his great folio work on the Roman Mosaics showing all the portions which have been restored at different periods, and he has been able to define the portions which undoubtedly belong to the fourth century. The general design and the architectural background are original: the inscription on the book held by Christ may have been altered, and the sky portion with evangelistic symbols seems to have been a good deal restored. But as a whole this most valuable monument of ancient art gives us a wonderful idea of the buildings, and coincides remarkably, considering the inherent conventionality of the representation, with the remains in Jerusalem and the ancient descriptions.

The picture has evidently been executed under the careful supervision of some returned pilgrim of the period, who with true Italian poetic imagination wished to represent not only the Holy Sites of the terrestrial Jerusalem, but also the courts of the celestial Zion with Christ and His Apostles sitting in conclave. It answers both these purposes, and as a decorative work of art magnificently fills the apse of the church. Behind the figure of Christ rises the *monticulus* of Golgotha surmounted by an immense jewelled cross. This is evidently the "Cross" so often mentioned by the pilgrim Silvia—an addition to the Holy Sites of fifty years after the time of Constantine. On each side of the cross may be seen the arcades of the Atrium, and behind these rise the Anastasis and Basilica in their correct relative positions, but without any idea of proportionate size.

It will be noticed that the view is supposed to be taken in a very natural manner from the high ground, overlooking the Holy Sites, of the upper part of Zion, where the Christian quarter of the Roman city was situated. The pilgrims would be most familiar with this view of the buildings and most often approach them from this side.

It is curious that there should be no history, traditional or otherwise, about this very important representation of the Holy Sites in the church of St. Pudenziana, which is believed to have been built on the site of the house of Pudens, friend of St. Paul, by Pope Pius I. in A.D 142. The restoration of the building and consequently of the mosaic is supposed to have taken place in the eighth century, and the mosaic may have again been touched when the church was modernised by the Gaetani family in 1598. De Rossi and Garrucci believe the original work to have been executed at the command of Pope Siricius in A.D. 390.

Representations or models of the Anastasis on ivory diptychs, caskets, or other small objects of the fourth and fifth centuries frequently occur in museums. Amongst the best known are the Trivulzio ivory [evidently of the same period and design as the mosaic in St. Pudenziana] now preserved in the museum of Count Trivulzio of Milan [fig. 2], the example in the British Museum [Maskell Collection][fig. 3], the Quedlimburg ivory [cast in the South Kensington Museum] [fig. 5], and that in the Bibliothèque Nationale, Paris [fig. 4].



FIG. 2.—The Trivulzio Ivory, Milan. From the Bulletin of the Russian Palestine Society, 1894.

From such evidence as we possess at the present — descriptions by contemporaries, pictorial representations, and a few traces on the rock-cut site—we conclude that about the year 333 A.D., after the laying bare of the Holy Sepulchre, the Christians were permitted to level the whole area around the Tomb for the purpose of the "adornment" spoken of by Cyril. This levelling of the rock surface was carried out in such a way as to admit of the spot identified with the Crucifixion being left as a hillock or "monticulus" standing in the midst, whilst on the west side of the levelled space the Tomb was treated as a kind of chamber with walls and covering of rock in the style of the numerous tombs of the Valley of Jehoshaphat, which are precisely similar in character. Incidentally it may be remarked that this type of rock-hewn architecture is worthy of a special study; the tombs of Palestine and Idumea, Egypt and India, are amongst the most interesting monuments of archæology, and it is curious to consider that the great Christian Memorial is perhaps one of the last examples of the kind ever hewn out of the living rock.

In detaching the cubicle of rock, containing the Tomb, from the surrounding cliff, a much larger space was given to the encircling pathway on the west side than seems to have been common in the cases of more ancient tombs, such as those in the Valley of Jehoshaphat. This was doubtless in consequence of the important character of the monument, and in anticipation of large numbers of people assembling within the area. It is not sufficiently clear whether Eusebius means by the word "hemisphærium" the semicircular space surrounding the Tomb, or the apse of the adjoining basilica. The probability seems that he means the latter, and that

round this semicircle there were twelve magnificent columns, each bearing a silver vase, the special gifts of the Emperor Constantine. These columns would, of course, form a colonnade supporting a cornice.

The so-called "Tomb of Absalom" in the Valley of Jehoshaphat, which so closely seems to resemble the Holy Sepulchre as described in ancient notices, is finished with a remarkable pyramidal covering constructed in masonry and resting on the cubical base of the monument. This type of tomb, partly excavated from the mountain side, partly constructed, was doubtless common in the Levant, but unfortunately the ease with which it could be broken up by quarrymen has led to the destruction of nearly all examples. At Akhiropietos, in Cyprus, a singularly large tomb of the class, still covered with its rock ceiling, survives. Elsewhere in the Levant the rock-cut tombs, formed by cutting away the rock, leaving the tombs standing like works of sculpture, are common enough of all periods in earlier history. They seem to be particularly numerous in Asia Minor.

For nearly 300 years the monuments of the Holy Sepulchre remained as originally built in the



FIG. 3.—British Museum. One of four plaques of stained red ivory, 4 inches by 3 inches. Italian, fifth to eighth centuries. On the door of the Holy Sepulchre is a representation of the raising of Lazarus. On the lower panel a seated figure of Mary weeping. Above the soldiers are the two Maries in attitude of grief.



FIG. 4.—The Anastasis and Basilica within the Walls of Jerusalem. Early Ivory (Bibliothèque Nationale, Paris). One of the few representations extant of the Martyrion Basilica, and possibly of the same period as the Madeba Mosaic, which it resembles.



FIG. 5.—Cast at South Kensington Museum. On top of richly decorated casket. German, 10th to eleventh centuries. Treasury of Cath. Quedlimburg. Presented by Emp. Henry I.

days of Constantine, doubtless influencing by their presence the course of early Latin ecclesiastical history, although they do not seem to attract so much attention perhaps as at a later period.

During the Dark Ages succeeding the fall of the Roman Empire, and the era of barbarian invasions from the East, the monuments on the Holy Sites at Jerusalem suffered the same fate as befell the still magnificent remains of the decaying Roman civilisation elsewhere. Père Lagrange in *La Science Catholique*, 1890 (p. 14), seems to have discovered that the Persian invaders of the Syrian provinces in 613 spared at first the buildings on the Holy Sites, but owing apparently to a revolt of the conquered district whilst the Persian army was encamped on the other side of Jordan busy about the building of the remarkable palace at Meschitta, they returned and decided upon the destruction of the Tomb of Christ. In this destruction the famous basilica is said to have been completely destroyed by fire, and the relics contained within it were carried away to Persia in the month of May 614.

Fifteen years after the first destruction of the basilica an attempt was made to restore it. The names of two celebrated ecclesiastics are associated with this work: Modestus, Abbot of St. Theodosius, and St. John the Almoner, Patriarch of Alexandria. The work seems to have been achieved by the year 629, in time for the triumphal return of the Emperor Heraclius with

the relic of the Cross, and for the solemn dedication of the new buildings on the 14th September of that year.*

The records which survive of this period of destruction and restoration are more scanty and less intelligible than those we have of the erection of the basilica and its colonnades in the fourth century. An equal obscurity reigns over the remainder of the Byzantine period. In 637 Jerusalem was occupied by the Arab Mohammedans for the first time, and the last vestige of the Roman Imperial protection of the Holy Sites disappeared. The Arabs do not appear to have injured the restored basilica or the Tomb, but on the contrary they became to a certain extent friendly partners in the property with the Christians. The entrance of the basilica on the east side, which seems to have been provided with a portico by Modestus, was converted into a small mosque for their convenience, whilst the area of the eastern hill on which the city stands (Mount Moriah) with its ruins of the Temple of Jupiter, was assigned to their exclusive use.†

The description of the Holy Sites by the pilgrim Arculfus, with his remarkably preserved plan [as reproduced in numerous recensions], affords us the best idea of their condition at this period. It is evident that after the rebuilding by Modestus the basilica was reduced to a very insignificant condition compared with its pristine importance; this part of the question is however of considerable obscurity. The Tomb was becoming the more important monument on the sacred area, and the time was approaching when the circular enclosure surrounding it would be converted into a regular circular church.

The plan and description by Arculfus stand in need of some little interpretation. The three walls which he mentions surrounding the Tomb must in all probability be understood to mean an outer wall of enclosure, an inner line of wall or colonnade, such as is often introduced in any kind of cloistered court, and the third or innermost wall is the outside casing of the rock-cut Holy Sepulchre. No covering over of the enclosed space around the Tomb is mentioned either by Arculfus [*c.* 700], Willibaldus [*c.* 722], or Bernard the Wise [*c.* 867]. Arculfus speaks of the "Basilica of Constantine," but already it had become especially identified with the Cross-finding legend of St. Helena—a legend which assumed such vast proportions in the later Middle Ages. Two entirely new buildings are mentioned as having been added to the general group—presumably by Abbot Modestus—the large new church covering over Golgotha, and a square church of the Virgin Mary.

The friendly terms on which Moslem and Christian at first lived together in the Holy City seem to have been continued during the ninth century, if we may credit the legendary history of Charlemagne and his friend Haroun-al-Raschid. To this period also belongs the first notice which we have of the covering over of the round or semicircular enclosure of the Tomb with a wood roof such as protected it until 1870. The *Annals* of Eutychius provide a picturesque legend in this connection. The Patriarch Thomas [813–821] is credited with the design of the very remarkable piece of timber construction which was eventually set up, and the ideas for which are supposed to have been revealed to him in a dream. In his vision he appeared to see forty phantoms, whom he recognised as martyrs, issue from one side of the Holy Sepulchre enclosure. These strange figures mounted the encircling wall, and stretching their arms and bodies over the space beneath, they seemed like caryatides supporting a central circular cornice and forming to some extent the outline of a domical roof. On awaking, the ingenious Patriarch

* Modestus proceeded to build again from their foundations the churches of the Resurrection and of Calvary. [*Antiochi Epist. in Bib. Patr. Græc.* Tome I, p. 1023, quoted by Robinson, vol. i. p. 388.] The Abbey of St. Theodosius in Jerusalem is referred to at different periods, and perhaps for the last time in a bull of Pope Honorius III in 1216, "cum hospitali et apothecis."

† The earliest writers who describe this event are Theophanes [*c.* 830] and Eutychius [*c.* 870]. The Arab authors are of the thirteenth century. Arculfus [697] does not seem to refer to the presence of a mosque within the portico. Under the friendly monarchs Charlemagne and Haroun-al-Raschid the possession of the Holy Sites appears to have been in the hands of the Jerusalem Patriarch, although the Moslems presumably continued to occupy the small mosque within the portico. The early Abasside Khalifs employed Christians as officers of trust and attendants on the person of the Moslem sovereign. (Robinson, vol. i. p. 393.)

seems to have been convinced of the important suggestions in his dream, and forthwith ordered forty great tree trunks from Cyprus—reminded no doubt of the wood of Shittim used by Solomon He seems to have been advised by experts of the period to use a larger number of tree-trunk supports in this novel construction, but he adhered to the number forty of the vision, not forgetting to institute a memorial altar of the forty martyrs which happens to survive even at the present day within the precincts of the Holy Sepulchre. The mention of Cyprus as the place whence the timber was procured suggests the idea that possibly the method of construction adopted may be traced in the roofing of the curious little Byzantine churches of that island. [*Vide* "Byzantine Timber Building," JOURNAL R.I.B.A., 1907, p. 575.] As far as can be gathered from the legend the circular wood roof at Jerusalem must have been constructed in the same way with tree-trunks resting on a wall plate *against* the wall, the upper ends supported by a circular curb of wood leaving a large opening in the middle. Eutychius describes the outer covering of the roof as being supported by the inner or lower circle of tree trunks, and between the two was a space sufficient for a man to walk upright along the top of the wall under the outer roof which rested on the *outside* of the wall. Even this brief description serves to show that the mode of construction consisted in the tent-like covering which is represented in the early copperplate views of the interior of the Anastasis at a much later period.*

The Holy Fire ceremony seems to have been instituted about the same time as the covering over of the Anastasis, and some little difference in the general arrangement of the group of buildings is referred to by the pilgrim Bernard Sapiens.

A change in the conditions between Moslems and Christians took place when Jerusalem passed into the hands of the Fatemite Caliphs of Egypt in the year 969. A period of persecution on the part of the new government against the Christians culminated in the furious acts of the mad Caliph El Hakem-be-Omr, the founder of the Druse sect, who ordered the complete destruction of the monuments on the Holy Sites. This devastation was apparently carried out about the year 1008 according to most authorities, and to judge from many of the accounts it was executed in a manner which could have left but few traces of the buildings identified with the sacred area.†

Between 1046 and 1048 the buildings of the Holy Sepulchre were rebuilt at the command of the Caliph Abu Tummim El Mostunser Billah, eighth Fatemite Sultan of Egypt.

For forty years the area had lain waste and unoccupied. Pilgrims still made their way to Jerusalem, and a great number of brief notices of their adventures are preserved by the numerous writers of the age; but they brought back with them little more than complaints of the profanations to which the holy places were exposed, and of the wretched conditions to which their brothers in faith had been reduced. The celebrated Gerbert, afterwards Pope Sylvester II., was one of the first of these pilgrims in the time of El Hakim. Descriptions of the Holy Sites before or after their restoration by El Mostunser are hard to discover, and this may perhaps arise from the usual insignificance of Byzantine buildings of that period. Nâsir-i-Khusrau, an Arab traveller of the period, gives an account which conveys the impression that the restored church was decorated internally with considerable magnificence.

* Willis (p. 74) states that the wood roof over the Holy Sepulchre was constructed of 131 squared cedars, in the form of a single cone, truncated at the top, where the light was admitted through a circular aperture, 12 feet, or perhaps more, in diameter.

† According to Will. of Tyre the ruin of the monuments was complete, and even the rock-cut Sepulchre itself was defaced and destroyed with much labour. "Prædicta ecclesia usque ad solum diruta" (Will. of Tyre). For about thirty years the Holy Sites appear to have lain desolate, and not until 1048 was any attempt made to restore them by the building of a small chapel on Golgotha.

"Anno D. 1033, ex universo orbe tam innumerabilis multitudo cœpit confluere ad Sepulchrum Salvatoris Hierosolymis, quantam nullus hominum prius sperare poterat" (Glaber, 4, 6). Now commences the great era of mediæval pilgrimage; of princes like Robert of Normandy and William of Angoulême, the German archbishops and bishops, the innumerable nobles and knights with their men-at-arms, ending in the decisive occupation of Jerusalem by the Crusaders of 1099.

The paucity of information upon the condition and the appearance of the Holy Sites during the eleventh century is compensated for by the numerous accounts of pilgrimages containing interesting details on the subject which were compiled by the first visitors to Jerusalem after the occupation of the city by the Crusaders in 1099. The narratives of the Anglo-Saxon Sæwulf [a monk of Malmesbury ?], 1102, and the Russian Abbot Daniel, 1125, give an excellent idea of the arrangements of the buildings at the time of the Crusaders' occupation, and before they had been touched with the object of erecting a vast Gothic cathedral in place of the group of Byzantine churches.

The group of churches seen by the first Crusaders on their entrance into the Holy City may not have been as originally rebuilt by the Caliph El Mostunser, for it would appear that towards the close of this disastrous period Jerusalem was subjected to all the horrors of pillage and massacre by the Seljuk Turks, who spared neither mosques nor churches. The date of this barbarian inroad is supposed to have been 1071.

The date of Sæwulf's pilgrimage to the Holy Sites is important. His editor, M. d'Avezac, seems to have established it as the year 1102 [*vide* Bohn's translation, Introduction, p. xxi], and consequently his very graphic descriptions of the round church and adjacent chapels represent them as they stood *before* the Crusades. He states that "the Holy Sepulchre was surrounded by a very strong wall and roof, lest the rain should fall upon it, for the church above is open to the sky." He then mentions that "in the sides of the church itself are attached, on one side and the other, two most beautiful Chapels of St. Mary and St. John. On the other side of the Chapel of St. John is a very fair monastery of the Holy Trinity, in which is the baptistery, to which adjoins the Chapel of St. James the Apostle, who first filled the pontifical see at Jerusalem. These are all so composed and arranged that anyone standing in the farthest chapel may clearly perceive the five churches from door to door. Without the gates of the Holy Sepulchre to the south is the Church of St. Mary called the Latin, because the monks there perform divine service in the Latin tongue. Adjoining to this church is another Church of St. Mary called the Little, near which is the hospital and monastery founded in honour of St. John the Baptist." The large church built in honour of Queen Helena, "which has since been utterly destroyed by the pagans," is, of course, the still famous basilica of the fourth century.*

The travels of the Russian Abbot Daniel are usually dated 1125, during the reign of Baldwin II. The orthodox abbot seems to have been a special envoy to the newly instituted Latin court, and during the ceremonies of the "Holy Fire," which he describes in detail, he was accommodated with a seat of honour near that of the King. He describes the arrangements of the church as a circular building with a large apse towards the east containing the high altar, and with apparently the thrones of the King and the Patriarch respectively on the north and south sides. The Tomb, overlaid with marble decorations, was surmounted by a colossal figure of Christ in silver, "made by the Franks," and perhaps somewhat distasteful to the iconoclastic orthodox. In spite, however, of this great image introduced by the twelfth-century artists into what was doubtless otherwise a Byzantine interior, the two great branches of Christianity seem to have shared the building in a more amicable manner than in more recent days. It is interesting to learn from this description that the great circular church was covered with the same kind of roof

* Sæwulf [c. 1100] describes the Rotunda of the Holy Sepulchre as "open to the sky." He also mentions the different "stations" of the open courtyard and the basilica ruins, and the place "Calvary" with Golgotha. The Churches of St. Mary the Latin, St. Mary the Less, and St. John the Baptist appear to have been then in use. Two most beautiful Chapels of St. Mary and St. John were attached to the Rotunda, and the existing chapels of the Monastery of the Trinity formed, as at present, the west side of the "parvis"; the "place of the baptistery" and the Chapel of St. James are mentioned as on the other side of the Chapel of St. John, which, presumably, was afterwards enclosed within the base of the thirteenth-century bell tower built by Frederick II.

The ceremony of the "Holy Light" on Easter Eve would appear to have been remarkably popular amongst both Latins and Greeks at the time of the capture of the city by the Crusaders. See Abbot Daniel, Fulcher of Chartres [1100], in *Gesta Dei per Francos*, and Sæwulf.

as was originally put up by the Patriarch Thomas of 300 years before. It is evident that it could not have been the same roof because of the two destructions of the church in 1008 and 1071. From an architectural or engineering point of view this remarkable roof was the great curiosity of the building, although from that point of view it does not seem to have attracted particular notice on the part of the mediæval pilgrims or those of a later date.*

The mosaic decorations within the Rotunda are described by the twelfth-century pilgrims as if they were works of art of unusual magnificence.† Traces of these mosaics are referred to in the comparatively modern times of Quaresimus and Sandys as of an imposing character.

It would seem probable that the transference of the old Byzantine buildings from their former orthodox occupants to a body of Latin ecclesiastics, constituting a patriarchal court and eventually an Augustinian convent, was effected by degrees. During the earlier years of the Crusading Kingdom the Church of St. Mary the Latin continued in use, and was probably not demolished until the commencement of the works of the new cathedral. The Augustinian convent was founded in 1120, and the famous consecration of the new choir of the canons—the Chorus Dominorum—by the Patriarch Fulcher took place on the 15th July 1149. The new building seems to have been about twenty years in course of construction.

The magnificent new church in the early transitional style of the South of France was erected during the reign of Fulk of Anjou and completed during the minority of his son Baldwin III., or, more properly speaking, under the guardianship of the queen-mother Milicent. The Second Crusade, in which the French interest was chiefly concerned, and in which the French King Louis VII. and his queen Eleanor of Guienne, the "Rose of Aquitaine," took part, was in 1148, and the consecration ceremony of a distinctly French piece of architecture was therefore appropriately witnessed by no fewer than four reigning sovereigns of French nationality. Under these circumstances it is not surprising to find the style adopted for the new buildings most distinctly French in character, representing doubtless a vast French influence not only in politics and social life, but especially in the arts and crafts of the settlers in the new Kingdom of Jerusalem during its palmiest days. In other monuments of the Holy Land of an earlier or a later period

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* Daniel [*c.* 1107] describes the ruins of the place where Helena found the Holy Cross. "It was a very large church with a wooden roof; now, however, there is nothing but a small chapel. Towards the east is the large doorway to which Mary the Egyptian came, desiring to enter the church, &c." "She passed out of this door on her way to the desert of Jordan. Near this door is the place where St. Helena recognised the true Cross, &c."

"Calvary and the place of crucifixion are enclosed by a [retaining] wall, and they are covered by a building ornamented with marvellous mosaics. On the eastern wall a life-like representation of the crucified Christ, and larger and higher than nature; on the south side a Descent from the Cross. There are two doors; one mounts seven steps to the doors and as many after. The floor is paved with beautiful marble. Beneath the place of crucifixion, where the skull lies, is a small chapel, beautifully decorated with mosaic, and paved with fine marble, which is called 'Calvary'; the upper part is called 'Golgotha.'"

Daniel describes the Holy Sepulchre: "Approached by a little door through which a man can scarcely get by going on bended knees. The sacred rock was visible through a covering of marble slabs by three small round openings on one side. The Sepulchre was surmounted by a beautiful turret resting on pillars, terminating in a cupola covered with silver-gilt plates, and on its summit a figure of Christ in silver above the ordinary height; this was made by the Franks."

The Patriarch resided in spacious apartments attached to the upper part of the church.

"The Church of the Resurrection is of circular form, containing twelve white monolithic columns and six pillars. There are six entrances, and galleries with sixteen columns. Under the ceiling, above the galleries, the holy prophets are represented in mosaic as if they were alive; the altar is surmounted by a figure of Christ in mosaic. Over the high altar is an 'Exaltation of Adam' in mosaic, and the mosaic of the arch above represents the 'Ascension.' There is an 'Annunciation' in mosaic on either side of the altar. The dome of the church is not closed by a stone vault, but is formed of a framework of wooden beams, so that the church is open at the top." The number of columns mentioned in this description varies in different MSS.

From translation from the French of Mme. de Khitrovo. *Soc. de l'O. L.*

† Nâsir-i-Khusrau, 1047. (Guy Le Strange: 1888.) "Inside, the church is everywhere adorned with Byzantine brocade (mosaic?), worked in gold with pictures. These pictures they have overlaid with a varnish of oil of Sandaracha (red juniper); and for the face of each portrait they have made a plate of thin glass, which is set thereon, and is perfectly transparent. This dispenses with the need of a curtain, for the glass is cleaned daily by the servants of the church."

Idrisi, 1154 (G. Le Strange), mentions a bell-tower in the same position as at present over the south door (Gate of the Crucifixion). He does not appear to have actually visited the Holy Land, but he seems to have heard of the rebuilding of the Crusaders, and he describes the choir as finished.

the traces of Italian and even German culture may be noticed, but in this great central memorial of the Crusades the French must be allowed to claim a complete ownership.

On approaching the Middle Ages—that period when the foundations of our modern life and thought and manners and customs were being laid—Jerusalem, instead of being a half-forgotten name, an inaccessible place but rarely visited by Frankish pilgrims at the peril of their lives, becomes the most interesting place on the world's surface to all Christendom, and to a great part of the Asiatic peoples as well. Chronicles, histories, travels, and government records, charters, monumental documents of all kinds, crowd upon the view, and the difficulty of digesting so much historical detail is probably greater than in almost any similar branch of study.

History from the eleventh to the thirteenth centuries—the epoch of the great Crusades—is of course the most important, in its relationships with modern Europe and civilisation, of any the world has ever seen. The very word *Crusade* conveys so much that it is needless to insist upon the absolute supremacy of the period in historical interest. And perhaps the most important monument—certainly the most remarkable for its history—which survives from those stirring days, is the Gothic church of the Holy Sepulchre.

The church built by the Crusaders is an especially interesting example of artistic development. It exhibits most distinctly the dawn of a new era in architectural design, methods of construction, and perhaps, to some extent, in ritual arrangements. The Dark Ages preceding the twelfth century had passed away with their characteristic Romanesque art, and the civilised method of life, both religious and secular, which we identify with the Middle Ages, was about to create those stupendous architectural monuments all over Europe, the particular characteristic of mediæval Christianity. The splendid cathedrals which formed the centres of Christian life in mediæval times owe all their beauty to the development of that particular style of art and architecture of which we see the first beginning in the church at Jerusalem.

In this church we have evidences of a scientific and organic principle of design and structure which belongs to the famous mason-craft of the great French cathedrals. The presence of the *ribbed vault* in part of the construction is sufficient to differentiate it from mere Romanesque building, although the style of decorative carving employed may have a somewhat earlier feeling in it than we usually associate with the pointed style.

One very remarkable feature about the twelfth-century design is the way in which the general arrangement of the Holy Sites has been worked into the new plan, and the strictly conservative scheme by which the circular church of the Anastasis is preserved intact from its original conception in the early part of the ninth century (*vide supra*). The remarkable conical roof of timber covered with lead as at first designed by the Byzantine Patriarch Thomas seems to have been repeatedly restored and repaired, as we shall see later on. This roof would doubtless be renewed by the Crusaders during their occupation of the Holy City for nearly two hundred years, and in all probability at the time of the new building of 1130 such a restoration would take place, although no records remain of the fact. The only monument connected historically with the Holy Sepulchre which the Crusaders destroyed for the purpose of their new work was the church of S. Maria Latina, and even that building, which of course became meaningless when the whole sacred area was in the possession of the Latin Church, is still marked by the apse which survives as an Armenian shrine on the east side of the Parvis (*vide* S. Maria Latina in Appendix). The ruins of the "Basilica of Helena," as it is sometimes called, were probably of a scanty description in the twelfth century; we hear nothing about them after the time of Sæwulf [1102] and by the middle of the century they had completely disappeared beneath the buildings of the Priory.

Foundation of the Augustinian Priory of the Holy Sepulchre.

The founding of the Priory is ascribed to King Godfrey by the chronicler Albertus Aquensis (Gesta Dei) writing, as is supposed, in 1184, who says: "In Templo Dominici Sepulcri viginti fratres in Christo divini cultores officii constituerenter.". Other authorities place the date in 1120.

The Canons Regular of St. Augustine, an order said to have been founded in 1061 at Avignon, represented a popular religious development of Benedictine monasticism of that period. The rule they observed differed but little from the older Benedictine, but they professed certain tenets peculiar to the teaching of the great Augustine. Like the Benedictines they lived in common, eating together in a refectory, and sleeping in a general dormitory. The Augustinian Order at a later period gave birth to the Premonstratensians and other branches. Although designated "Canons," and holding prebends (Theodorich, 1175) they were virtually monks and lived a cloistered life. Their habit was black with a white rochet, and over all a black hood. At the present day the Augustinian Order is represented in Jerusalem by a small convent on Mount Sion.

As an additional evidence of the intensely "French" character of the first Crusades this institution of the then recently founded Augustinians—who may be considered perhaps as one of the numerous religious developments of mediæval France—as the guardians of the recovered Holy Sepulchre, is of importance. As representatives of the religious interests of Western Christendom in the Holy Sites, they took the place of the Benedictines who had hitherto occupied the church of St. Mary the Latin.

Latin Patriarchs.

The following list taken from De Mas Latrie's *Tresor de Chronologie* is of a certain architectural interest. These important personages coming from various European districts which are characterised by schools of art may be supposed to have influenced the design of the new buildings to some extent, by patronising artists of their own nationalities during the progress of the work.

Dagobert, Bishop of Pisa	1099	Estienne, Archbishop of Chartres	1128
Ebremar	1103	Guillaume, Bishop of Mechlin	1130
Gibelin, Archbishop of Arles	1107	Foulcher, Archbishop of Tyre	1146
Arnoul de Rohes	—	Amalric, Bishop of Noyon	1157
Germond, Archbishop of Amiens	1118	Heraclius d'Auvergne, Archbishop of Cæsarea	1180

From 1180 to 1227 doubtful occupants of the Patriarchal Throne are mentioned.

Girold, or Geraud, Abbot of Clugny	1227	Raoul de Grandville	1294
Guy, Bishop of Nantes	1240	Landulf	1295
Robert	1244	Anthony Beak, Bishop of Durham	1305
Jacques, Bishop of Liège	—	Pierre de Plaine Chassagne, Bishop of Rodez	1311
Pierre, Bishop of Agen	1263	Raymond	1324
Guillaume, Bishop of Agen	1265	Pierre de la Palu, Bishop of Limassol	1329
Tommaso d'Agni, Bishop of Cosenza	1272	Eli de Nabinaux, Archbishop of Nicosia	1342
Giovanni, Bishop of Vercelli	1278	Guillaume Amici, Bishop of Chartres	1351
Eli	1279	Philip de Cabassole, Bishop of Cavaillon	1366
Nicholas de Hanapes	1280		

The last nine names are those of mere titulars who had no residence within the territory of Jerusalem, Nicholas de Hanapes being the Patriarch who lost his life in escaping from the siege of Acre in 1291.

The Constitution of the Augustinian Convent.

The Latin Patriarchs and Priors of the Holy Sepulchre resided within the precincts—the Patriarchs in an imposing palace which still survives on the west side of the Rotunda, the

outside of which is but little altered by its subsequent use for Mohammedan purposes; the Priors in some part of the buildings on the eastern side long since pulled down or altered beyond recognition.

The convent consisted of a college of twenty secular Canons of St. Augustine, who appear to have had a refectory and dormitory in common. Considerable remains of the refectory survive, and its western part [3 bays] has been turned into the Orthodox Church of the Twelve Apostles, The whole of the south wall, with ruined vaulting, also stands intact. The refectory was of a simple architectural character, the vaulting of pointed arches without rib-mouldings starting from square pilasters with a plain bevelled string-course cornice. In the lunettes between the string-course and the vault are plain splayed windows with pointed heads. At the east end of the refectory, where in all probability stood the conventual kitchen, all traces of the mediæval buildings have now been completely removed in building the new Russian church. At this point [probably in some connection with the doles from a conventual kitchen] stood the entrance to a covered street or bazaar traditionally known as "Malcuisinat," or the street of poor cookshops, where the poorer classes of pilgrims obtained their food.

The dormitory or "dortoirs" of the Canons, frequently referred to by mediæval pilgrims, may still be traced on the north side of the open space now occupied by the Abyssinian village where once the cloister garth extended.

For above fifty years the splendid memorial of mediæval religion and romance continued to be used in the manner its builders intended. During this period [1130–1187] the Holy Sepulchre Church would appear as it is described for us by the pilgrim John of Wurzburg in 1150 and Theodoric in 1175.

The ownership of the building was divided between the Latin Patriarch and the Prior of the Augustinian Convent. The Patriarchate [which to a great extent still survives in the modern Christian Street—Rue du Patriarche of the Middle Ages] was situated on the west side of the church, and appears to have had a separate door of entrance into the gallery of the Rotunda. The Augustinians had their convent on the eastern side of the site, with, of course, a separate entrance to the church. A catalogue of the officials connected with the buildings is preserved in a MS. of uncertain date called "Commemoratorum de Casis Dei," which has been several times published in collections of documents relating to the period.

PRIORY OF THE HOLY SEPULCHRE.

Canons 23	Ministers 17	Custodians of the Relics . 5
Priests (Vicars) . . . 9	Prepositors 2	Cellarers 2
Deacons 14	Accountants 2	Treasurer 1
Sub-Deacons . . . 6	Notaries 2	Water Guardian . . . 1
Custodians (fragelites) . . 13	Seneschal 1	Porters 9
Monks (!) 41	Custodians of the Sepulchre . 2	Hospitallers 3
Candlebearers to the Patriarch 12	Custodian of Calvary . . 1	

This large number of 166 officials would probably be attended by quite a small army of servants and hangers-on, who would perhaps have made up an even larger resident population on the Holy Sites than the multitude of sects constitute in modern days.

In 1187 the siege and capture of Jerusalem by Saladin marks the beginning of the decay which for more than a hundred years sapped the vitality and stifled the growth of those once brilliant little principalities founded by the adventurers of 1099. Saladin seems to have treated conquered Jerusalem with leniency in spite of his threats to butcher the inhabitants and destroy their churches. The Holy Sepulchre is even said by some authorities to have remained untouched.

For more than forty years Jerusalem remained in the hands of the Mohammedans whilst the princes of Europe continued to threaten with fresh Crusades, most of which enterprises ended in disaster to their originators. Lastly the astute Emperor Frederick II. and Melek Kamel,

Sultan of Egypt, came upon the scene in 1228, and by their friendly and politic arrangements the Holy City was divided between Christians and Moslems as in the days of Charlemagne and Haroun-al-Raschid.

We unfortunately have but little information about the condition of the Holy Sepulchre Church during the Moslem interregnum, 1187–1228, but the great Emperor Frederick has left his mark on the monument by building a very original and at the same time German bell-tower at the west side of the famous old Provençal façade of the south transept. Frederick crowned himself within the " Chorus Dominorum " of the Crusaders as King of Jerusalem, a mere empty title under the circumstances, and one which he and his successors were quite unable to maintain, but by a singular chance his presence in the Holy City is recorded by the most prominent feature of the church exterior.

In 1239 Richard Earl of Cornwall, brother of Henry III. of England, with William Longsword, Earl of Salisbury, and many other nobles of England, ventured on what was practically the last of the Crusades which had any successful issue. Richard obtained a settlement by which the great object of the Crusades seemed to be accomplished ; Palestine belonged to the Christians. Richard then returned to England, and was received everywhere on his journey as the deliverer of the Holy Sepulchre. There was one thing, however, which marred the prospect, the government of the country was left virtually in the hands of the great military Orders, instead of under a responsible king, with the natural results of divided counsels, opposing interests, and want of cohesion in face of a common danger which very soon appeared on the frontiers.

In 1245 the terrible Carismian Tartar invasion from Central Asia took place, and in spite of the union of Christians and Moslems in a common cause against these savages, Jerusalem was sacked and most of its inhabitants were massacred. To this overwhelming event is perhaps due the very complete destruction of certain parts of the precincts—the cloister of the Priory for instance. The wooden roof over the Rotunda would be destroyed at the same time in all probability.

Since 1245 the Holy Sepulchre Church has been considered the property of a Mohammedan State, whether under the Sultans of Egypt or their successors, the Sultans of Turkey, and the Latin Christians who then lost their sovereignty over Jerusalem have ever since been tenants of the Holy Sites by virtue of *capitulations* or treaties with the Mohammedan landlord, or by simply renting the property as Turkish subjects under the patronage of the Russian Government and the Negus of Abyssinia.

During the fourteenth century innumerable stories of pilgrimages to the Holy Sites were written, many of which have been published in different collections. One of the most interesting is that of Ludolphus de Sudheim, a Westphalian priest, who describes the condition of the Holy Sepulchre in 1348. According to this account the use of the church seems to have by this time been regulated very much in the way in which we see it at the present day. Latins, Greeks, Armenians, Nubians [Copts and Abyssinians], Syrians, and Georgians occupied different parts, but it is singular to find that " Canons Regular " are said to have still officiated for presumably the Latin section. The pilgrims were admitted at stated times within the church, which must have been inclosed in much the same way as at present to allow of such arrangements. The pilgrims were obliged to pay four florins for the privilege of passing a day and a night adoring the Sepulchre, and this tax was exacted by a Saracen official called *Amil*, a sort of prefect appointed by the Sultan. Twice in the course of the year admittance to the church was granted gratis—at Easter, and on the festival of the Invention of the Holy Cross—at which times the different nationalities of Christendom celebrated their particular rites in different languages, and made processions with their bishops and clergy, carrying censers and candles according to their different customs.

Earlier in this century the Italian Dominican of Sta. Maria Novella Florence, Fra Ricoldo, describes in his *Itinerarium* a somewhat similar condition of affairs. He made two pilgrimages to Jerusalem ; on the first occasion he was refused admittance to the Holy Sepulchre, but was more successful on his second attempt. At the end of the century Simone Sigoli wrote one of the earlier guide-books for pilgrims, a mere list of the stations where " perdono di colpa e di pena " might be obtained by the devout pilgrim, showing that the visit to the Holy Land had become a matter of system and custom. Simone gives the cost of the pilgrimage at the end of the fourteenth century as 300 gold ducats, inclusive of visits to Mount Sinai and Damascus. Each pilgrim travelling in such a style took a personal attendant with him.

During the fifteenth century we approach more clearly the conditions of modern days. The absolute abandonment of the idea of crusading colonisation in the Levant synchronises with the discovery of America. The European colonial enterprise is attracted to a new world, and we hear no more of Frank adventurers attempting to carve out for themselves feudal principalities in the nearer East. On the eve of the great changes, political, social, and religious, which divide the Middle Ages from modern days, the history of the Holy Sepulchre also suffers a change. Instead of a religious relic to be fought for, and the possession of which by Christians was perhaps regarded as a symbol of a united Faith and a talisman for the good of the Christian Commonwealth, the Monument of the Resurrection becomes one of a series of places to be visited for a purely religious sentiment. The " Evagatorium " of Felix Faber, a monk of Ulm, 1484, is a voluminous and amusing account of pilgrim adventures at this period. The young German nobles, whom Felix accompanied as a sort of bear-leader, seem to have conducted themselves in the Church of the Holy Sepulchre very much as such young men would do in the present day, inscribing their names and coats-of-arms upon its walls in a truly modern way [fig. 6].



FIG. 6.—Examples of Pilgrims' Graffiti on the Entrance of the Holy Sepulchre Church.

With the advent of printing begins the long and incalculable series of more modern descriptions of the Holy Land.

During the sixteenth century one or two events took place of a certain importance in the history of the Holy Sepulchre. In 1516 the whole of Syria and Palestine passed from the possession of the Egyptian Caliphs into the hands of the Turkish Sultans, who from henceforth became the owners of the Holy Sepulchre. Selim I. is credited with being the most bigoted of the Turkish Sultans, but fortunately for Christendom his religious animosities were directed more against dissenters from his own faith than against the Christians. Passing on his devastating campaign of 1520 close to Jerusalem, he contemplated the total destruction of the city, but changed his mind in consequence of a lucky dream, and is even said to have presented gifts to the Christians in the Holy City.

The Turkish occupation of the Holy Land seems to have been inaugurated by friendly relations between the new governors and the Latins. The policy of Selim I. was to subdue the Moslem world beneath the new Caliphate of Constantinople, for which purpose he employed the firearms and artillery, and even the bombardiers, lent him by the Grand Master of Rhodes and the Venetian Republic. He did not live long enough to turn upon his Christian allies, as he doubtless intended to do when once he had consolidated his empire ; he left this for his son Soliman the Magnificent to attempt after his death.

With the advent of the new sovereign a change for the worse took place in the position of Latin Christians in Jerusalem. The Minorites, or Order of St. Francis, who had owned the church

known as the "Cenaculum" or Home of St. Mary (a holy site of great antiquity) for nearly three hundred years, were at this period the guardians of the Holy Sepulchre. In 1535 their troubles began by the imprisonment in the Tower of David * of Fra Tommaso di Norcia, Custode, and his brethren. Fra Tommaso eventually died a prisoner in Damascus. In 1549, according to the *Gesta Dei per Fratres*, the Minorites were expelled from the Cenaculum, which thenceforth became the Moslem shrine of "David's Tomb," as it remains at the present day. A curious letter upon this subject of their expulsion written by Soliman the Magnificent to Francis I. of France still survives. But although the Latins seem to have enjoyed but little favour with the new Sultan, it was during his reign that Fra Bonifazio di Ragusa was permitted to carry out a restoration of the Holy Sepulchre in 1555.

This remarkable fact is attested by the drawings of the restored monument in the early copperplates published by Bernardo Amico, *Trattato delle piante e immagine de' sacri edifizi di Terra Santa*, and by the descriptions published by Fra Bonifazio Corsetto himself in *Liber de perenni cultu Terræ Sanctæ*, in 1553. Within the outer chamber, which appears to have been added to the monument at this period, was placed a tablet with the following inscription :—

D. IESV SEPVLC A FVNDAM INSTA FVIT ANO S INCAR MDLV
PER F BONIFACIV DE RAGVSIO G S M SION SVPTIBS

The appearance of the restored monument, which has been preserved in the contemporary copperplate, is very suggestive of the usual Turkish *kiosk* style of architecture of the period. It seems to have undergone as great a change as was possible from the earlier designs which had occupied its place from time to time [fig. 23].

At the same time that the Franciscans (Minorites) were engaged in restoring the Holy Sepulchre, they were building their new convent (the "Casa Nova") within the walls of the city, and also about this time the Sanjak of Jerusalem presented them with the old wooden gates of the Golden Gateway of the "Haram" mosque, as a relic of the time of Christ and of His entrance into Jerusalem from Bethany. These gates were placed among the relics preserved within the Church of the Holy Sepulchre, and this act on the part of the Moslems serves as another proof of the fluctuating state of mutual relations between the two great religions.

During the seventeenth century the Holy Sepulchre figures in history in a new and remarkable light. Completely dissociated from the crusading idea, it becomes an object for the cupidity of an Italian prince, Ferdinand I., Grand Duke of Tuscany. No page of history is perhaps more romantic and extraordinary than the story of the visit of Faccardino, Emir of the Druses, to the Tuscan Court in 1603, and of his return to the Levant with the captain-general Inghirami and the Tuscan fleet for the purpose of carrying off the Tomb to Florence. Faccardino and his confederates actually found means to enter the church and begin their operations for detaching the sepulchre, when, being discovered by the "malice" of the Greeks, they were compelled to take to flight. The ill success of the intending larceny was viewed as a great misfortune, and whilst the Emir retired to his possessions at Beyrout to carry out his schemes for introducing Italian luxury and art into the Lebanon, the Grand Duke of Florence had to be content with his magnificent Medicean Chapel, deprived of its central ornament, which was to have been the famous Tomb of Christ. How the Italians of that comparatively enlightened age could have been induced to consider such a project feasible is indeed astonishing. A rock-hewn tomb—even in the form of a kind of cabin, with thin rock walls and roof—would be impossible to remove except in fragments, which would be of little value when pieced together. But at an earlier age such a removal of the House of Loretto was attributed to angelic agency.

* *Castellum Pisanum.*

During the centuries immediately succeeding the loss of Jerusalem in 1245, the relics once contained in the Church of the Holy Sepulchre, and within its precincts, were considered to have been removed for greater security to Europe. Rome obtained the " True Cross " [S. Peter's], the " column of flagellation " [S. Prassede, presented by Cardinal Colonna in 1223]; and the famous Sudarium, or winding sheet of Christ, which is mentioned at an early period, after being removed to Cyprus, was presented by Marguerite de Charni to Louis II., Duke of Savoy, at Chambéry, in 1452, and afterwards brought to Turin in 1575 by Emanuel Philibert, for the purpose of enabling S. Carlo Borromeo to venerate it without the fatigue of crossing the Alps. Whilst at Chambéry it was invoked by Francis I. of France, who went on foot from Lyons to worship at the shrine.

In 1621 appeared the highly important contribution to our knowledge of the Holy Sites, written by George Sandys, of London. His vivid descriptions and interesting " graven figures " are most valuable. At this time the fabric of the church must have been but little altered since mediæval times, the restoration by Bonifazio di Ragusa having been confined to the " Monument." He mentions :—

" The Temple of the Resurrection. A stately Round cloystered below and above, supported with great square pillars, flagged heretofore with white marble, but now in many places deprived thereof by the sacrilegious Infidels.

" Now between the top of the upper gallery and extream of the upright wall, in several concaves, are the pictures of divers of the Saints in Mosaique work, full faced, and unheightened with shadows according to the Grecian painting; but much defaced by malice or continuance. In the midst on the South side is the Emperour Constantine's opposite to his Mother's, the memorable Foundresse. This Round is covered with a Cupola sustained with rafters of Cedar, each of one piece, being open in the midst like the Pantheon at Rome.

" The Ascent to Calvary. Prostrating themselves and tumbling up and down with such an over active zeale.

" Opposite to the dore of the Temple, adjoyning to the side of the Chancell are certain Marble Sepulchres without titles or Epitaphs.

" The chappell of Isaac, without, and spoken of before; and where they keep the Altar of Melchisedeck."—Sandys, p. 128.

At about the period of Sandys' *Travailes*, the guardian of the Holy Sepulchre was Fra Francesco Quaresimus, the author of a monumental book on the Holy Land—the famous *Elucidatio*. In it he mentions many particulars about the buildings of the Holy Sepulchre, and refers among other things to the ruined mosaics in the Calvary Chapels, with their inscriptions.

Philip IV. of Spain, perhaps the most powerful European monarch of his period and at the same time a most religious zealot, naturally took an interest in the fate of the Christian monuments of the Holy Land. In 1628 he sent 30,000 ducats for their repair, and with this sum the timber roofs of the churches of Jerusalem and Bethlehem seem to have been reconstructed.

Towards the close of this century another Englishman, Henry Maundrell, wrote an account of his pilgrimage to Jerusalem from Aleppo, where he was stationed at the time (1697) as chaplain of the Levant Company. He does not enter into particulars as to the architecture of the Holy Sepulchre Church, but he describes how

" In galleries round about the church, and also in little buildings annexed to it on the outside, are certain apartments for the reception of friars and pilgrims; and in these places almost every Christian nation anciently maintained a small society of monks, each society having its proper quarter assigned to it by the appointment of the Turks, such as the Latins, Greeks, Syrians, Armenians, Abyssinians, Georgians, Nestorians, Cophtites, Maronites, &c., all of which had anciently their several apartments in the church; but these have all, except four, forsaken their quarters, not being able to sustain the severe rents and extortions which their Turkish landlords impose upon them. The Latins, Greeks, Armenians, and Cophtites keep their footing still; but of these four the Cophtites have now only one poor representative of their nation left; and the Armenians are run so much in debt that it is supposed they are hastening apace to follow the example of their brethren who have deserted before them.

" Besides their several apartments, each fraternity have their altars and sanctuary, properly and distinctly

allotted to their own use, at which places they have a peculiar right to perform their own Divine service, and to exclude other nations from them.

"But that which has always been the great prize contended for by the several sects is the command and appropriation of the Holy Sepulchre, a privilege contested with so much unchristian fury and animosity, especially between the Greeks and Latins, that, in disputing which party should go into it to celebrate their mass, they have sometimes proceeded to blows and wounds even at the very door of the Sepulchre, mingling their own blood with their sacrifices, an evidence of which fury the father guardian showed us in a great scar upon his arm, which he told us was the mark of a wound given him by a sturdy Greek priest in one of these unholy wars. Who can expect ever to see these holy places rescued from the hands of the infidels? Or if they should be recovered, what deplorable contests might be expected to follow about them, seeing, even in their present state of captivity, they are made the occasion of such unchristian rage and animosity.

"For putting an end to these infamous quarrels, the French King (Louis XIV.) interposed, by a letter to the Grand Vizier, about twelve years since, requesting him to order the Holy Sepulchre to be put into the hands of the Latins, according to the tenor of the capitulation made in the year 1673, the consequence of which letter, and of other instances made by the French King, was that the Holy Sepulchre was appropriated by the Latins. This was not accomplished until the year 1690, they alone having the privilege to say mass in it: and though it be permitted to Christians of all nations to go into it for their private devotions, yet none may colemnize any public office of religion there but the Latins.

"The daily employment of these recluses is to trim the lamps, and to make devotional visits and processions to the several sanctuaries in the church. Thus they spend their time, many of them for four or six years together; nay, so far are some transported with the pleasing contemplations in which they here entertain themselves, that they will never come out till their dying day, burying themselves (as it were) alive in our Lord's grave.

"The Latins, of whom there are always about ten or twelve residing in the church, with a president over them, make every day a solemn procession, with tapers and crucifixes and other processionary solemnities, to the several sanctuaries, singing at every one of them a Latin hymn relating to the subject of each place.

"Good Friday night, which is called by them *nox tenebrosa*, is observed with such an extraordinary solemnity that I cannot omit to give a particular description of it.

"As soon as it grew dusk, all the friars and pilgrims were convened in the Chapel of the Apparition (which is a small oratory on the N. side of the holy grave, adjoining to the apartments of the Latins), in order to go in a procession round the church; but before they set out, one of the friars preached a sermon in Italian in that chapel. He began his discourse thus: 'In questa notte tenebrosa,' &c., at which words all the candles were immediately put out, to yield a livelier image of the occasion; and so we were held of the preacher for near half an hour, very much in the dark. Sermon being ended, every person present had a large lighted taper put into his hand, as it were to make amends for the former darkness, and the crucifixes and other utensils were disposed in order for beginning the procession. Amongst the other crucifixes was one of a very large size, which bore upon it an image of our Lord, as big as the life. This figure was carried all along in the procession, after which the company followed to all the sanctuaries in the church, singing their appointed hymn at every one.

"The first place they visited was the Column of Flagellation, a large piece of which is kept in a little cell just at the door of the Chapel of the Apparition. There they sang the appointed hymn, and another friar entertained the company with a sermon in Spanish touching the scourging of our Lord.

"From hence they proceeded in solemn order to the Prison of Christ. Here likewise they sang their hymn and a third friar preached in French. From the prison they went to the Altar of the Division of Christ's Garments, where they only sang their hymn without adding any sermon. Having done here they advanced to the Chapel of the Derision, at which after their hymn they had a fourth sermon, in French.

"From this place they went up to Calvary, leaving their shoes at the bottom of the stairs. Here are two altars to be visited—one where our Lord is supposed to have been nailed to the cross, the other where His cross was erected. At the former of these they laid down the great crucifix upon the floor, and acted a kind of resemblance of Christ's being nailed to the cross: and after the hymn one of the friars preached another sermon, in Spanish, upon the crucifixion. From hence they removed to the adjoining altar, where the cross is supposed to have been erected. At this altar is a hole in the natural rock. Here they set up their cross, with the bloody crucified image upon it; and leaving it in that posture they first sang their hymn, and then the father guardian, sitting in a chair before it, preached a passion sermon in Italian.

"At about a yard and a half from the hole in which the cross was fixed, is seen that memorable cleft in the rock, said to have been made by the earthquake which happened at the suffering of the God of Nature 'when the rocks rent and the very graves were opened' (S. Matt. xxvii. 51). That this rent was made by the earthquake that happened at our Lord's Passion, there is only tradition to prove; but that it is a natural and genuine breach, and not counterfeited by any art, the sense and reason of everyone that sees it may convince him: for the sides of it fit like two tallies to each other, and yet it runs in such intricate windings as could not well be counterfeited by art, nor arrived at by any instruments.

"The ceremony of the Passion being over, and the guardian's sermon ended, two friars personating Joseph and Nicodemus approached the cross, and, with a most solemn and concerned air both of aspect and behaviour, drew out the great nails, and took down the feigned body from the cross. It was an effigy so contrived that its limbs were soft and flexible, as if they had been real flesh; and nothing could be more surprising than to see the two pretended mourners bend down the arms, which were before extended, and dispose them upon the trunk in such a manner as is usual in corpses.

"The body, being taken down from the cross, was received in a fair large winding sheet, and carried down from Calvary, the whole company attending as before, to the Stone of Unction. Here they laid down their imaginary corpse, and, casting over it several sweet powders and spices, wrapped it up in the winding sheet. Whilst this was doing they sang their proper hymn; and afterwards one of the friars preached, in Arabic, a funeral sermon.

"These obsequies being finished, they carried off their fancied corpse and laid it in the Sepulchre, shutting up the door till Easter morning; and now, after so many sermons and so long, not to say tedious a ceremony, it may well be imagined that the weariness of the congregation, as well as the hour of night, made it needful to go to rest.

"March 27.—The next morning nothing extraordinary happened, which gave many of the pilgrims leisure to have their arms marked with the usual ensigns of Jerusalem.

"In the afternoon of this day the congregation was assembled in the area before the holy grave, where the friars spent some hours in singing the Lamentations of Jeremiah.

"March 28.—On Easter morning the Sepulchre was again set open very early. The Mass was celebrated just before the Holy Sepulchre, being the most eminent place in the church, where the father guardian had a throne erected, and being arrayed in episcopal robes, with a mitre on his head, in the sight of the Turks, he gave the Host to all who were disposed to receive it, not refusing children of seven or eight years of age. This office being ended we made our exit out of the Sepulchre, and, returning to the convent, dined with the friars."

This account of one of the principal ceremonies of the Churches in Jerusalem, still practised annually by both Greeks and Latins on their respective Eastertides, is of interest as showing how unchanged the use of the building has been for more than two centuries. The ceremony of the Latins, at which the present writer has assisted, is absolutely the same at the present day as it was in 1697, but for the introduction of a German sermon after the hymn in Calvary.

The Rev. Henry Maundrell does not mention the curious cups containing the spices, and decorated with the arms of the Emperor and the King of Spain, which are carried in the procession and must be as old as his time.

During the eighteenth century all interest in the Holy Sepulchre waned to its lowest ebb. The world was filled with wars and revolutions amongst Christian States, whilst the Turkish Empire had sunk into a state of lethargy after its last struggles with the decaying Venetian Republic. A good many books were written by travellers in the Levant during this period, but in place of the pilgrims' guide-books we have scientific treatises by students of natural history. Amongst such visitors very few display much interest in the architectural remains of the Holy City. Such books are illustrated with the deplorable copperplates of the period, mere sketches from memory and utterly useless, as a rule, for any purpose of study. One of the most interesting of these ponderous folios is Pococke's *Description of the East*, 1745. In it there is a reference to the Rotunda of the Holy Sepulchre which is of interest: "The roof was of cypress, and the King of Spain giving a new one, what remained of the old roof was preserved as reliques, and they make beads of it to this day." "To the north of it [the Stone of Unction] are the tombs of four Kings of Jerusalem, not well known, whose bodies, it is thought, were carried to Christendom when the Saracens took the city" (the view of Calvary shows two tombs at the entrance). The roof referred to as given by the King of Spain must be the new one erected in 1628 by Philip IV.

During the latter part of this century the church had fallen into deplorable neglect and almost oblivion—an oblivion from which it was dragged for the purpose of affording material for German speculation and investigation. But the bookseller, Jonas Korte, who started a theory to discredit the traditional character of the Holy Sites, unintentionally revived an interest in the monument by polemical discussions which have endured for the past hundred years.

During the nineteenth century the Church of the Holy Sepulchre once more underwent a destruction by fire in 1808, which completely obliterated the mediæval character of the Rotunda, and caused much damage in other parts of the church, especially to the Calvary chapels. This unfortunate conflagration originated in the portion of the gallery round the Rotunda which was occupied by the Armenians, and according to the official report of Callinicus, Patriarch of Constantinople, the fire began at 8 a.m. on 30th September 1808. It consumed the cupola of wood covered with lead of the Rotunda, destroying the small chapel built on the top of the Holy Sepulchre. The whole of the fittings of the Rotunda, with its surrounding galleries and chapels, and the "treasuries" and convent apartments were burnt. The interior of the great choir with its iconostasis, stalls, &c., was reduced to a mass of ruins, and the semi-dome of the apse above the "Cathedra" was severely injured. The only portion of the Holy Sites unaffected by the fire was the subterranean Chapel of Helena. The chapels on Calvary were gutted by the fire, and according to the Latin version of the catastrophe (*Breve notizia dell' incendio*, 12. *Ottobre*, 1808, published by the Franciscans) a wooden building over these chapels fed the flames and caused much damage to this quarter of the church. The roof of the Rotunda fell in upon the Sepulchre, but the latter, though crushed without, was uninjured within. The marble columns supporting the great roof were calcined and the walls injured. The buildings of the Latins on the north were all saved, and, of course, the external tower was untouched.

After much difficulty and many negotiations permission was obtained from the Porte to rebuild the church. In spite of the endless disputes amongst the Christian sects themselves concerning their respective shares in the ruined property, all the high dignitaries of the Empire at Constantinople and all the petty officials at Jerusalem had to be bribed. But, notwithstanding all the delay involved, the restored buildings are said to have been completed for reconsecration in 1810. The architect employed by the Greeks for their share of the work was a certain Comnenus of Mitylene.

In 1840 the Roman Catholics made some repairs to their property around the Chapel of the Apparition. Here it may be mentioned that this chapel and the convent attached are said to have been secured to the Franciscan Order through the mediation of King Robert of Sicily in 1342. At the back of the chapel stands a disused font of a quatrefoil plan, somewhat similar to the famous one in the basilica at Bethlehem. It may possibly be the font used during the Latin Kingdom of Jerusalem.

The revived interest in the Holy Sites on the part of both orthodox and Roman Catholic Christians during the nineteenth century culminated in the Crimean War of 1854–55, which is usually attributed to the quarrels between the rival Churches. The Russian influence in Jerusalem did not, however, receive any very great check to its development, nor did the Roman Catholics succeed in obtaining any additional privileges within the Holy Sepulchre in consequence of this war; and about fifteen years afterwards we find the Russians putting up at their own expense the great iron girder dome covered with lead which now covers over the Holy Sepulchre.

Since 1870 absolutely nothing has been touched in the fabric of the Church of the Holy Sepulchre, either in the way of repairs or structural additions. In these days of "restoration," how long will such a state of things continue—*ultima ora latet*?

Note on the Tombs of the Kings said to have been destroyed at the time of rebuilding the Rotunda and the East End in 1808.

A screen dividing the southern transept from the Chorus Dominorum as at present appears in the old plans, and on the south side of this screen the area of the transept seems to have constituted the Royal burial place of the Latin Kings of Jerusalem.

On either side of the entrance of the Chapel of Adam were the monuments of Godfrey and Baldwin I. The inscriptions on their tombs have been preserved in various authors :—

✠ HIC JACET INCLYTUS DUX GODFRIDUS DE BULION QUI TOTAM ISTAM TERRAM AQUISIVIT CULTUI CHRISTIANO. CUJUS ANIMA REGNAT CUM CHRISTO. AMEN. ✠

✠ REX BALDUINUS JUDAS ALTER MACHABAEUS SPES PATRIAE VIGOR ECCLESIAE VIRTUS UTRIUSQUE QUEM FORMIDABANT CUI DONA TRIBUTA FEREBANT CEDAR AEGYPTI DAN AC HOMICIDA DAMASCUS PROH DOLOR IN MODICO CLAUDITUR HOC TUMULO. ✠

Four other tombs placed along the side of the screen above mentioned are said to have contained the bodies of Baldwin III., Amaury, Baldwin IV., and Baldwin V. These are the marble sepulchres mentioned by Sandys.

All these sepulchres were probably of the same plain and unostentatious design which may be made out in the rude copperplates of Zuallardo and other pilgrims' books. They consisted of simple coped blocks of stone like the covers of sarcophagi, raised on short columns, and with panelled sides. No sculptured figures or armorial bearings appear to have been displayed upon them. Quaresimus professes to have preserved the epitaph on the boy-king Baldwin V.

A few examples of this same type of tomb survive in Cyprus, such as the tombstone of Adam d'Antioche in a church near Nicosia. (See Enlart, *Art Gothique en Chypre*, p. 486.)

By a strange chance, owing to its having been covered over by a stone platform ever since the Moslem occupation of the city, until quite recent years, a solitary tombstone of a crusader still lies *in situ* before the south-transept entrance. The grave looks as if it had never been disturbed, so that the body possibly still lies untouched below. The person commemorated in the inscription on the stone is a certain Philip de Aubigni, Governor of the Channel Islands, one of the Councillors of King John at the signing of Magna Charta, and tutor of the young

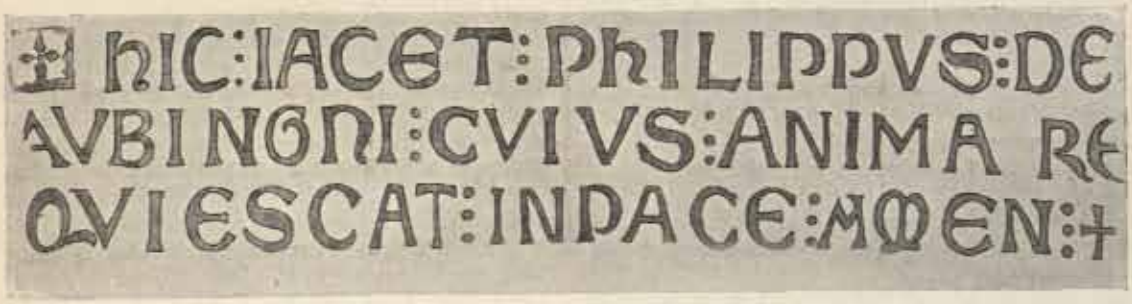


FIG. 7.—Inscription on Tomb of Sir Philip de Aubigni, at the Entrance of the Holy Sepulchre Church.

king Henry III. He visited Jerusalem in the train of Emperor Frederick II., 1229, and died there in 1236. F. Gough Nichols, F.S.A., in *Proceedings of Archæol. Inst.* [Lincoln] gives the text of a letter from Philip de Aubigni to the Earl of Chester on his arrival in Jerusalem. Two Acts of Assizes held by him in Jersey are sealed with the same coat-of-arms as on the grave-stone in Jerusalem—four fusils in fess.

(*To be continued.*)

A WEEK IN PICARDY.

By J. D. Crace, F.S.A. [*Hon. A.*].



Fig. 1.—Reims Cathedral: capital, south of nave.

It is two years since the writer described a short visit to a few of the great churches of Northern France,* and now he has to record the impressions made, during a spring visit this year, by other noble churches on the eastern side of the route to Paris—with Amiens as a starting point. The Cathedral of Amiens is so well known that to dwell upon it in detail would be superfluous; but the impression made by its vastness, its homogeneity, and its grand simplicity of line must ever be fresh and striking. Ruskin's little "Bible of Amiens" is a charming companion and a useful index to the extensive and interesting sculpture [fig. 2].

The beautiful stalls are probably the most perfect example of Gothic woodwork in existence—no less perfect as joinery than as carving of infinite skill and fancy. For full two hours did we examine and wonder at the intricacies of its design and the life and charm of its detail, crisp as when executed with such delightful certainty of hand.

We lingered under the great vaulting of nave and aisles till the light grew dim, and the very vastness and dignity of the building seemed to grow more impressive as the light faded, even from the colour of the glorious windows.

From Amiens we came to Beauvais—much more the French country town, with many an old gabled house front, and with its great market-place full, as we saw it, of busy life under widespread market umbrellas; the huge mass of the uncompleted Cathedral looming over the housetops. A magnificent monument of a grand ambition unfulfilled, although not without much persistence.

Allowing that Fergusson's aphorism is true—that exaggeration is never in good taste—and this wonderful height of the choir is doubtless exaggeration, yet it is a very noble one. It is, as it were, the apotheosis of the glory of the vertical in Gothic architecture; and it needs a cooler critic than the writer to follow Fergusson to his conclusion. We are awed by the boldness of the conception, and moved by the delicate beauty of the design. But the architects of this wonderful structure must have had bitter moments. At one time the collapse of the choir vaulting led to that duplicating of the support by intermediate columns and arches which gives so compressed an effect to the arcading, whilst even accentuating the height.

In two bays on the south side may be seen a curious change of intention. A cusped circle was carved in the spandril between two inserted arches: but apparently it was found better that the long shaft from which the vaulting springs should be carried down to the main column, like the others;

* Journal, 6 June 1908.



FIG. 2.—AMIENS: W. PORTAL.

it is therefore carried down across the cusped circle. When, in the sixteenth century, the later architect boldly erected a steeple some five hundred feet high, that also crashed down some five years later, working havoc below. In repairing the great piers the old grouped-column sections were abandoned, and an inexpressive roll and hollow substituted, sadly detrimental to the effect at the crossing. Still, there remain that amazing choir and apse, with clerestory windows over fifty feet high, rich with stained glass up to the very vaulting, which itself seems to soar and grow dim in space.

The carved doors of the south porch are fine specimens of the art of the time of Francis I., to which period or a little earlier belongs the Palais de Justice, once the Episcopal Palace, close at hand.

Near also, but out of sight in a courtyard north of the Cathedral, is a delightful little entrance porch in the angle of the court [fig. 3].

Below, towards the river, lies the Church of S. Etienne, with an early north doorway, and otherwise interesting [fig. 4]. A little further, and on the river itself, is a fine old mill, whose history one may suppose to go back as far as that of the Cathedral. Crossing the river, a short walk uphill brings you to a charming early Renaissance mansion, now the "Ferme de St. Symphorien," its fine doorway broken away to admit the farm carts; and from the terrace of this lies below you all Beauvais with its Cathedral rising like a great rock, dominating the whole.

From Beauvais we came to LAON, perched on a long ridge of rock above the fertile plain. The steep slopes are topped by the high retaining wall which girdles the town, at the eastward end of which rise the six towers of the Cathedral. Seen from the railway below they have a gaunt and somewhat crude appearance, the tall openings giving them a look of incompleteness, an effect dispelled when they are seen from the town. These and some of the details are well shown in Nesfield's admirable drawings. The fine interior is remarkable for its square east end, like our English churches, uncommon in France; and it has an additional arcade above the true triforium and below the clerestory. Immediately north of the Cathedral is the Palais de Justice, formerly the Bishop's Palace, also of the thirteenth century, standing on an open arcade and backing on the town wall.

Besides the little church of the Templars in the garden of the Musée are many other antique remains, including three old gateways to the town [fig. 5]; and passing westward we came to another fine church of the thirteenth century, St. Martin's, a simple, dignified building, where we found the parish priest catechising his boys. The plain



FIG. 3.—BEAUVAIS: ABBÉ GELLÉE'S HOUSE.



FIG. 4.—ST. ETIENNE, BEAUVAIS.

pointed arches of the nave spring from square piers with attached shaft to nave and aisles. As we left the church by the north door we saw, kneeling alone before a chapel altar, a young soldier, his fair, closely-cropped head reverently bent, his blue military overcoat falling in straight folds about his knees—an earnest, motionless figure, suggestive in the evening light of the vigil of a knight of old. Passing on, through an old gateway, to a path outside the walls, we came round to a point from which we could watch, across the valley, the golden light slowly fade from the towers of Laon Cathedral.

The next day found us at ST. QUENTIN, a bright town with a spacious "Place," at one end of which stands the gothic Hôtel de Ville on its arcade of pointed arches, while in the centre is the spirited modern monument which commemorates the siege of 1557.

The Cathedral of St. Quentin is closely built round on the south side, and nowhere is there wide space from which to view the exterior [fig. 6]. Within, one is impressed at once by the great height of the nave (some 24 feet higher than that of Chartres), by the beauty of the chevet, and by the splendour of the stained glass there and in the north transept. Less favourably is one struck by the polychromatic decoration of the eastern part of the church; not because it is particularly inharmonious, but because it in no way recognises the constructive lines, and being carried out in strong tones, and stopping short at the level of the main arches, it cuts the height in half and arrests the eye below the triforium. Later we paid a visit to the Musée, to see Delatour's pastel portraits. They justify his reputation; for these portraits, executed in the eighteenth century, have a vigour and character unequalled in this medium. Delatour is St. Quentin's celebrity. His statue stands in front of the Cathedral.

Returning to Laon we made thence for the CHÂTEAU DE COUCY, being blest with a really fine day among many showery or dull. Those who have not seen Coucy can have little conception of what a thirteenth-century strong place could be. The defensive contrivances, the skill of execution, and the bold scale of the plan are alike astonishing. The little town, with the castle at its N.W. extremity, occupies a plateau entirely enclosed by bastioned walls. Only from the town can the castle be entered, and then across a wide moat, and through a succession of portcullised gateways. Four great towers of fine masonry defend the external walls of the castle, within which walls are vast storehouses, stables, and offices; to the north, where the hill-side is steepest, are the Sieur's family apartments, with large tracery windows overlooking the country; but towards the town, and surrounded by its own outer wall and moat, towers the great keep [fig. 7], 210 feet high, with walls 34 feet thick, the final defence—having its own wall, its own stores, its own means of offence. Well might the owners of this impregnable stronghold boast the motto—"Roi ne suys, ne prince, ne duc, ne comte aussi: Je suys le Sieur de Coucy." We took our lunch on a little vine-covered terrace



FIG. 5.—LAON: ARDON GATE.



FIG. 6.—CATHEDRAL OF ST. QUENTIN.

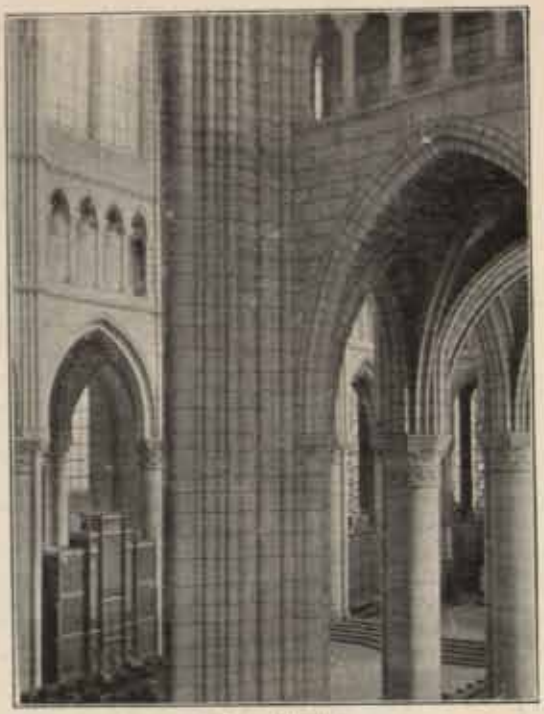


FIG. 8.—SOISSONS.



FIG. 7.—CHÂTEAU DE COUCY.



FIG. 9.—ST REMI: PART OF THE SCREEN.

with the great castle before us and speculated as to what manner of men were these great Seigneurs, responsible to no man, lords of all they overlooked; and, later, sat on the ruined wall and listened to the nightingale singing among the blossom of cherry or apple trees, with the scent of wallflower perfuming the evening air.*

The same night we arrived at Soissons. As a town, one must allow that it has a somewhat purposeless air. There is a rather dreary "Place" at the edge of the town; the streets seem to lead nowhere. But the Cathedral of Soissons, especially its grand nave and choir, must be reckoned among the finest of French churches [fig. 8]. Its interior has been scraped and repaired, and the jointing pointed with black cement. Now, admitting that the jointing of masonry aids the perception of the contours, this emphasising of the joints is very disturbing.

The south transept is particularly interesting, being apsidal, the arches carried round and forming an ambulatory. From the south-east of this apse opens a chapel with a delightful arrangement of columns and vaulting. The triforium forms a wide gallery all round the church, affording admirable views of nave and transepts. The rich glass (thirteenth century) still remains in the lower windows of the main apse, and incomplete remains of the glass in the clerestory. But how glorious must have been the effect when the whole was perfect!

More prominent on entering the town is the Portal of St. Jean-des-Vignes—the west façade only of a great abbey church with two beautiful spires. It stands now in a barrack-yard.

As the shadows lengthened we came to Reims, to find the splendid façade of the Cathedral glowing in the golden sunlight. In this we were fortunate, for we had but fitful gleams the next day, and much rain. But where there is so much to be seen and studied within, as well as without, the tricks of weather are not fatal to enjoyment. We were not without opportunities for examining the wealth and beauty of the external sculpture; but a brief record of travel is not the place to describe in detail the glories of the architecture, the stained glass, the tapestries which enrich the interior of such a cathedral as that of Reims. One may, however, note the wonderful effect of the nave, with its great clerestory windows retaining much of their stained glass, and the simple arcade of small single arches which make the triforium seem like a wide frieze below them; all melting as it were into the apse with its high-stilted arches below, and its tall windows above ablaze with magnificent glass and seeming compressed by the converging stone-work; while right and left the great tapestries on the aisle walls afford a background of softened colour to the arches of the nave.

Yet, after this, the Church of St. Remi will equally delight the artist. Its grand, simple forms, the magnificent series of stained glass in the clerestory, the saint's shrine, with the beautiful Renaissance screen which encloses it by filling the spaces between the columns of the choir [fig. 9], and, not least, the great squares of tapestry hanging from above the arches of the transept, combine to make a striking picture. Two Roman monolith granite columns flank the west portal: two more occur in the nave. Their tops have been chipped away to fit the twelfth-century capitals.

In the "trésor" of the sacristy are some splendid embroidered copes of different epochs, many fine Limoges enamels and the beautiful gold chalice of St. Remi, probably of the twelfth or thirteenth century, among many other valuable objects.

But Reims as a city, and a prosperous one, has many interesting features besides these grand churches. There are picturesque old houses still remaining, a Roman arch, a very fine Town Hall of the same period in design as the screen in St. Remi (Louis XIII.). It is worth while to give the inscription which commemorates its architects:—

"CE BÂTIMENT A ÉTÉ CONSTRUIT DE 1627 À 1634 SUR LE PLAN DE L'ARCHITECTE REMOIS, JEAN BONHOMME. LE PAVILLON CENTRAL A ÉTÉ ÉLEVÉ À LA MÊME ÉPOQUE D'APRÈS LES DESSINS DU SCULPTEUR REMOIS, NICOLAS JACQUES."

The building has, however, been extended in the same style, and the interior apparently quite remodelled late in the nineteenth century.

One other monument must be mentioned, the Banquet Hall in the Archbishop's Palace, a noble hall, in which were held the coronation banquets, with a fine Gothic chimney piece at one end, disfigured by being painted white-and-gold when Charles X. was crowned, the last for whom it was used.

From Reims we turned homewards by way of Ghent and Bruges. Although both are full of interest, they lie outside our subject. Yet I am tempted to allude for a moment to the paintings, not only of Memling, so well known as they are, but to those by Geerhardt David, in the Communal Museum at Bruges, which in power and beauty of colour are no less worthy of admiration.

* An excellent little pamphlet on the Castle, by M. E. Viollet-le Duc, is published, and sold at the Château.

TOWN PLANNING.

PAPERS COLLECTED BY THE R.I.B.A. TOWN PLANNING COMMITTEE.

XX. MR. SPEAIGHT'S SUGGESTED IMPROVEMENT AT HYDE PARK CORNER.

By H. Inigo Triggs [*A.*].

Next to Trafalgar Square, there is hardly a more important traffic place in London than that formed by the junction of Piccadilly, Park Lane, Grosvenor Place, and Constitution Hill; and any attempt to re-plan Hyde Park Corner upon more architectural and dignified lines is worth being very seriously considered by the authorities concerned. We are therefore indebted to Mr. Speaight for bringing forward his scheme for improvement at the present moment, when the question of a National Memorial to King Edward VII. is being discussed.

Before considering Mr. Speaight's scheme it will be interesting to recall the previous history of Hyde Park Corner. Mr. Speaight in the brochure that he has circulated says :—

"The importance of architecturally treating this Western Entrance to the Metropolis in a dignified way was fully appreciated by Robert Adam, who in 1778 prepared a carefully designed scheme, which can now be seen at the Soane Museum. Sir John Soane also published plans for the same purpose in 1796, 1817, and 1836, which can also be seen at his Museum in Lincoln's Inn Fields. Soane, in preparing two of his plans, was influenced to a large extent in his designs by the entrance into the Acropolis at Athens. Although none of these schemes would be now feasible on account of the present crowded state of the traffic at this point, yet in each case the author recognised that this important position called for an architectural treatment."

In 1873 the Metropolitan Board of Works began to consider the question of improvements in the neighbourhood of Hyde Park Corner with a view to making better provision for the traffic. The whole matter remained in abeyance for nine years, and in 1882 the First Commissioner of Works brought forward a second proposal which was eventually carried out and completed in May 1883.

This scheme cannot be said to meet adequately the traffic requirements of to-day, and its shapelessness is, as Mr. Speaight says, a thing of wonderment to foreigners visiting the Metropolis and a thing of shame to any Englishman who has the slightest idea of the principles on which a Place should be laid out.

The scheme that Mr. Speaight has now brought forward is best described in his own words :—

"By the realisation of the suggested improvement not only would the present shapeless mass of roadway now forming the junction between Piccadilly, Knightsbridge, Grosvenor Place, Constitution Hill, and Hyde Park be transformed into a large rectangular enclosure, at once dignified, spacious, and artistic, but an extremely appropriate site would be obtained for the National Memorial to King Edward VII.

"The space available for the purpose of the suggested improvement would provide, at a comparatively small cost, an enormous Place, 725 feet long and 410 feet broad, reminiscent of many stately enclosures of a similar nature to be found in Paris, Berlin, Vienna, Rome, Venice, and other cities. Its area, approximately 300,000 square feet, would be nearly three times as large as the Piazza S. Marco at Venice, and considerably more than twice the size of Parliament Square.

"And, in addition to providing a suitable site for the Royal Memorial, the east and west boundaries of the Place offer facilities for its further embellishment by the erection of the Shakespeare Memorial Theatre, and at some future date a National Opera House on the site of St. George's Hospital.

"Under the arrangements proposed, the Decimus Burton's Arch would be removed from its present position at the top of Constitution Hill to become the central feature of the southern boundary of the new Place.

"Re-erected in the altered position suggested, this archway would naturally form the Royal Entrance to Constitution Hill, whilst the lateral screens or colonnades of coupled Corinthian columns, when incorporated with the existing structure, would give a monumental and appropriate appearance to the wide roadway proposed to be formed on the north side of the grounds of Buckingham Palace.

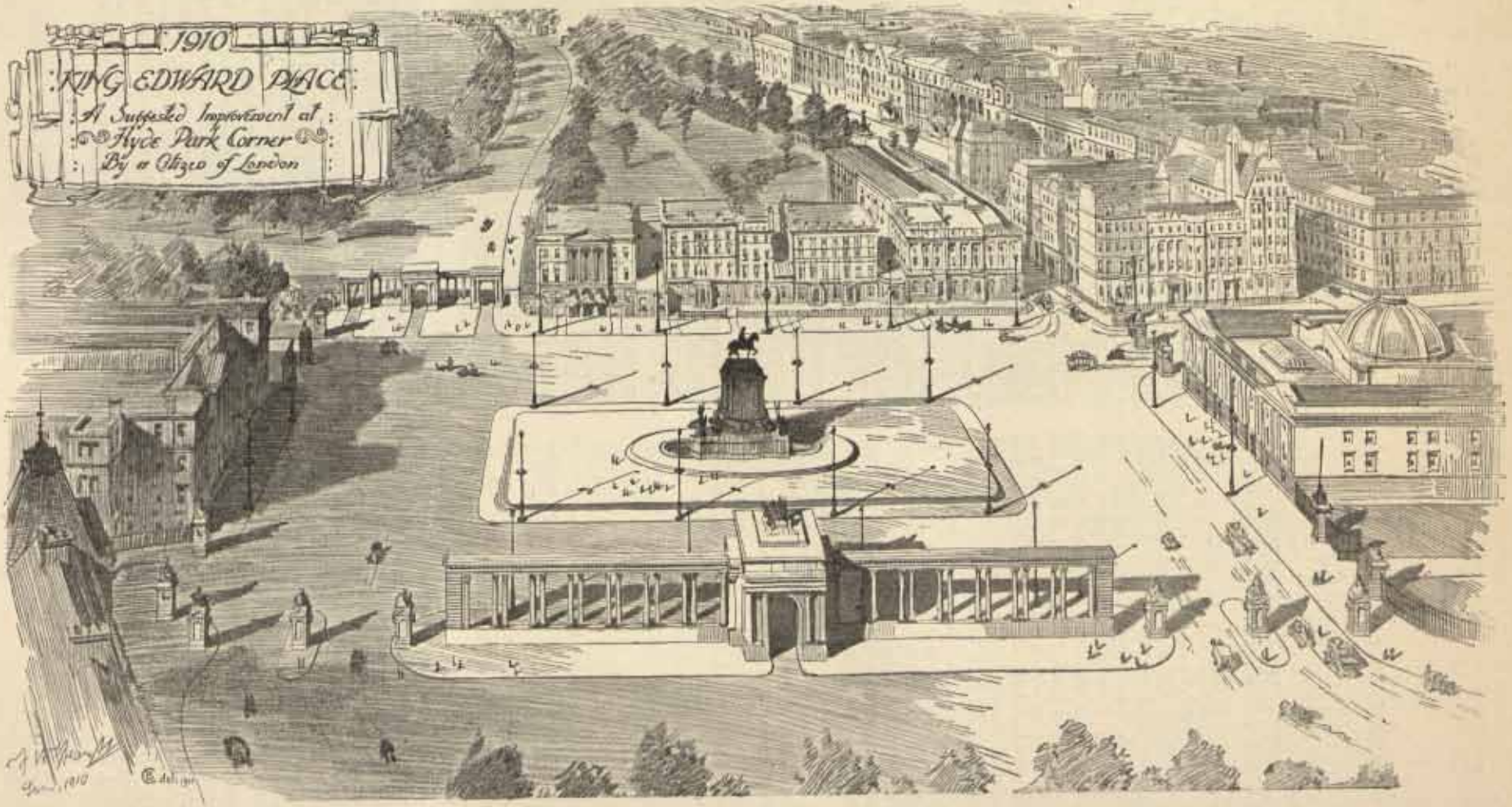
"In arranging the plan every effort has been made to provide effective vistas, and an unusually fine one would be obtained diagonally across the Place from the east end of Piccadilly by St. James' Street to Grosvenor Crescent.

"Architecturally the appearance of the Place dominated in the manner proposed, viz. by a centrally placed equestrian monument of the late King, and flanked on its east and west sides by public buildings designed to give the requisite balance and symmetry, could scarcely fail to be satisfactory from an æsthetic point of view.

"Nor have practical considerations been neglected in working out a scheme upon which, from first to last, a considerable amount of study has been expended.

"For instance, it is confidently expected that under the scheme now brought forward the difficulties hitherto associated with the traffic at Hyde Park Corner would entirely disappear, or at least be lessened to a very considerable extent."

One of the most important features of Mr. Speaight's scheme is the widening of Piccadilly by 20 feet, thus bringing the curb in a line with the existing railings of the Green Park, and the fine row of trees that at present is situated just within these railings would therefore line with the new curb, thus converting the south pavement of Piccadilly



MR. SPEAIGHT'S SUGGESTED IMPROVEMENT AT HYDE PARK CORNER.

See plan, JOURNAL R.I.B.A., 30th July, p. 699.

into a delightful boulevard. The widening of Piccadilly is an urgent matter that has been pressed home to the authorities by the Report of the London Traffic Commission. It is impossible to watch the congestion of traffic in Piccadilly any afternoon during the season without being amazed that the difficulty has not long ago been rectified by the simple process of placing back the park railings 20 feet. This precious 20 feet of parkland is hardly ever used by a single individual, and by throwing the land into the roadway the public would not be robbed of one inch of open space.

We entirely concur with Mr. Speaight's plan in the provision that it makes for entirely surrounding the new Place with buildings of a monumental character. He suggests that in the event of his proposal being carried out a sum of £75,000 might be obtained from the Committee of the Shakespeare Memorial Theatre for a site on the east side of the Place. The part of the scheme that is perhaps hardly likely to find favour with architects is the colonnade that it is proposed to erect on the south side of the Place, and the planning of so fine a triumphal arch in a meaningless way is detrimental to the whole scheme. With the fine background of trees that is afforded by the gardens of Buckingham Palace it would be possible to plan a low architectural screen wall, possibly of concave form like the entrance to "Unter den Linden" in Berlin; but with this exception Mr. Speaight's scheme has much to commend it, and we cannot fail to admire his public spirit in bringing forward the proposal.

SIR THOMAS DREW, P.R.H.A., LL.D.: A MEMOIR.

By Albert E. Murray, A.R.H.A. [*F.*].

Thomas Drew came of a well-known Co. Limerick family, but was himself a native of the North, his father being the Rev. Thomas Drew, D.D., Rector of Old St. Ann's, Belfast, a well-known and highly-esteemed divine. He was born in Belfast on 8th September 1838, received his early education in that city, and was articled to the late Sir Charles Lanyon, R.H.A., President of the Royal Institute of the Architects of Ireland, afterwards head of the firm of Lanyon and Lynn. From the first Thomas Drew showed great aptitude for architectural design. After the completion of his articles, he came to Dublin in 1862, being then about twenty-four years of age, and entered the office of the late William George Murray, R.H.A., with whom he was associated for a number of years. In 1871 he married Miss Adelaide Anne Murray, sister of Mr. William G. Murray, and daughter of Mr. William Murray, Architect of H.M. Board of Works in Ireland.

During the period of Mr. Drew's association with Mr. W. G. Murray, he was closely identified with the design and supervision of several important buildings, notably Messrs. Gilbey's, in Upper Sackville Street; the Hibernian and Provincial Banks: on the plaster modelling and internal decoration of the latter building he read a most interesting paper before the Institute of Architects at the time. Soon after coming to Dublin he was awarded a special silver medal by the Institute of Architects for his set of measured drawings of the Portlester Chapel in St. Audoens Church, High Street, Dublin.

Entering upon independent practice, he speedily established for himself an extensive connection, his chief forte being ecclesiastical work, in which he especially delighted. He first began in North Frederick Street, removing thence to Upper Sackville Street, and later on to No. 6 Stephen's Green, where he remained for many years, in a house designed by himself, and at the time regarded as the perfection of good street architecture. The house formed largely the subject-matter of an appreciative paper read before the Institute of Architects (Ireland) by Sir Charles Cameron, C.B., an Hon. Fellow of the Institute. Finally, some twenty years ago, he removed to No. 22 Clare Street, where he practised up to the time of his death, and where for several years, under circumstances that are well known, he gave hospitable shelter to the Irish Architectural Association.

During his long and honourable career as a practising architect in Dublin, Mr. Drew became responsible for a great number of works of distinguished merit, of which the following were among the chief executed: The new Cathedral, Belfast; the Ulster Bank, College Green; Messrs. Atkinson's premises adjoining the bank; the graceful church of St. Kevin, South Circular Road; Messrs. Robert Smyth & Co.'s premises in Stephen's Green; Clontarf Presbyterian Church; the beautiful new church of Maralin, Co. Down; the restoration and practical reconstruction of Waterford Cathedral (in the course of which the plan was discovered to be similar to that of the Danish foundation of Christ Church Cathedral, Dublin, Waterford being a stronghold of the Danes); the Trinity College Graduates' Tercentenary Memorial Building; alterations to the Library and Reading Room of Trinity College; the beautiful spiral staircase to the organ chamber of St. Patrick's Cathedral, erected in 1901 at a cost of £11,000; the fine Law Library of Ireland at the Four Courts, Dublin, for the Honourable the Benchers of the King's Inns; the Rathmines Town Hall; restoration of Colemaine Church; improvements at St. Nicholas' Church, Galway; very large additions to Lough Rynn, Dromod, Co. Leitrim, for the Hon. Colonel Clements, D.L.; additions to Coolarigan, Kilcock, for Mr. R. M. Wilson; additions to Currygrane, for the late Mr. James Mackey Wilson, D.L.; additions

to Killagree, Co. Kildare, for Colonel St. Leger-Moore, C.B.; additions to Knockrobin, near Tullamore, for Colonel Biddulph, D.L.; additions to Castle Archdale, Co. Fermanagh, for Colonel M. Archdale, D.L.; Knockbreda Church, Belfast; the Masonic Boys' Schools, Clonskeagh, Co. Dublin; the Grammar School Library, Christ Church Cathedral, Dublin; and a host of other works, large and small, on all of which he brought to bear great skill and refinement, and an intensely painstaking measure of care.

He was on more than one occasion consulted with reference to English Cathedrals, notably in the case of the late J. L. Pearson's Truro Cathedral a few years ago, when there were certain failures, which Sir Thomas Drew diagnosed as simple "flushing" of the joints of the piers. On this case he wrote an able and luminous report, in which he deprecated all idea of panic, and set forth the real causes of the small failure.

Despite the degree of professional success he attained, and the numerous commissions that for over forty years flowed in to him, Sir Thomas Drew never had an opportunity of achieving a success in a really great building until he was commissioned to design the new Cathedral for Belfast. For this he first made a scholarly design in the Gothic style of the fourteenth century, only to set it aside and to evolve a really masterly conception in the form of a most original design based on Romanesque tradition, suggestive of much of the rich and glowing detail of the round-arched work of Southern France, as seen at Arles, etc., and in the domed churches of the Charente District. Unhappily, want of funds prevented his seeing this fine conception fully completed. The exterior is still quite unfinished, but the interior is a noble and impressive modern church, to which no illustration that we have seen does full justice. To ecclesiastical design Sir Thomas Drew gave of his best, and no trouble was too great for him in order to make his work as perfect as possible. He was the only Irish architect honoured with an invitation to submit a design for the Queen Victoria Memorial in London, and he sent in a masterly suggestion, including a scheme for the reconstruction of the park façade of Buckingham Palace, which was not, however, accepted, the work being entrusted to Sir Aston Webb, R.A.

But Sir Thomas Drew's energies, busy man as he was, were never so centred in his professional work as to exclude all other interests. He was an indefatigable sketcher and measurer of old work. He knew the old work of England intimately and lovingly. Many of his holidays were spent on the annual excursions of the English Architectural Association, the last occasion the writer remembers to have met him there being at Lancaster in 1897, when he was full of zeal and vigour, measuring and sketching the old work. His sketches, not distinguished for exceptional prettiness, were remarkable for workmanlike accuracy and effect, particular attention being always paid to the detail and the construction. To the last he was a most strenuous advocate of this form of architectural education, and to the end of his days he was a student of the art he professed. In his earlier days he was a very fine draughtsman.

In other pursuits he displayed much versatility. For one who had not enjoyed the advantages of a University education he had remarkable classical knowledge, and was a thorough master of the English language and literature, possessing a literary style, fluent, pure, and vigorous, that gripped attention and excited interest. Every subject that he handled he handled well and with distinction.

He was a deeply read and well-informed antiquary. In 1895 he was honoured by election to the Presidential chair of the Royal Society of the Antiquaries of Ireland, the largest Antiquarian Society in existence.

He joined the Royal Institute of the Architects of Ireland soon after coming to Dublin, and became successively Member and Fellow. For very many years he acted with industry and energy as honorary secretary, subsequently, for nearly twelve years, holding office as President of the Institute; at the period of his death he was serving upon its Council.

In 1889 Sir Thomas Drew was elected a Fellow of the Royal Institute of British Architects, and during his occupancy of the presidential chair of the Irish Institute he held a seat on the Council.

He was Cathedral architect to the National Cathedral of St. Patrick, Dublin; St. Patrick's Cathedral, Armagh; and Christ Church Cathedral, Dublin, and under his direction various works of reparation were from time to time undertaken.

In Christ Church Cathedral, his annual lecture descriptive of the history and fabric of the church, given on every St. Stephen's Day at Strongbow's tomb in the nave, was looked forward to with interest by many of the citizens, and was always well attended. A ready and witty speaker, he had the great gift of making himself interesting on almost any subject.

For many years he was a Commissioner of Blackrock Township, displaying much practical commonsense in the affairs of the district.

He was an original member of the Architectural Association of Ireland in the "sixties." He proposed the first resolution at a meeting held in the Grosvenor Hotel, Dublin, in 1896, for the purpose of reviving it, and was the first member enrolled in the new body, in which he ever took the kindliest interest.

As a man of keen artistic tastes, he was naturally the friend of painters and sculptors, and becoming first an Associate and later a full Member of the Royal Hibernian Academy of Arts, he was elected Professor of Architecture, and on the death of Sir Thomas Farrell was chosen as President of the Academy. His last years were spent in vigorous

but unhappily fruitless efforts to obtain better official recognition and support for the representative body of artists in Ireland.

Upon the formation of the Georgian Society, in 1908, for recording the vanishing relics of old Dublin, he was chosen as one of the vice-presidents, and spoke at the inaugural meeting.

When the Belfast architects a few years ago decided to establish a local society of their own, he was unanimously selected as the first President of the Ulster Society of Architects in his native city.

In 1900, when her late Majesty Queen Victoria revisited Ireland for the first time after many years, Sir Thomas Drew was commissioned by the citizens to design a triumphal arch, to be erected at the entrance to the city. He evolved an excellent adaptation of one of the ancient city gates of Dublin, and here her Majesty was, according to ancient custom, presented with the keys of the city by the Lord Mayor. In the same year Sir Thomas Drew received the honour of knighthood at the hands of his Excellency Earl Cadogan, Lord Lieutenant of Ireland. To commemorate the event his architectural brethren decided to make him a presentation, and the gift he chose was a "loving cup," to be transferred to the Institute. To the cup was attached an old Irish silver spoon, a christening gift to Sir Thomas, and the presentation was made at a representative gathering of Irish architects at a dinner in Dublin.

Five years later the University of Dublin conferred upon him the degree of LL.D. *honoris causa*, in recognition of his distinguished attainments.

Only a few weeks before his death, the Statutory Commission of the new National University of Ireland honoured him by asking him to fill the newly established Chair of Architecture, and to serve upon the Sites Committee of the Senate. Rather against his own inclinations—for he had well earned a title to honourable retirement, and to rest—he accepted in characteristically unselfish fashion, feeling it to be his bounden duty. In response to a little note of congratulation and good wishes from the writer, he, under date 15th January last, wrote a lengthy letter of warm thanks, instinct with energy and hope. After referring to "having been laid aside by illness, and out of affairs in general," he goes on to say: "I did not take much interest about it (the Chair), and when I returned to work in rude health again, I knew nothing about what was being done, as I had not been at Institute meetings for many months, and knew no one connected with the National University. The offer of the Professorship was a surprise to me, and one which for some reasons I was not altogether very anxious to accept; but it seemed a plain duty to do so while I find myself active and vigorous to do work for the profession—at least in organisation."

It is not so much as the most distinguished of living Irish architects that Sir Thomas Drew will be missed, but as the warm, staunch friend, the kind adviser and wise counsellor, especially of younger men. As a characteristic action, may be recalled a little incident that occurred only a short while before his fatal illness. A brother architect—a much younger man—being unfortunately involved in a building dispute about which litigation was pending, consulted Sir Thomas as an old friend. At once, without a moment's hesitation, he offered to undertake a long and arduous journey to a remote part of the country and to make a difficult and troublesome examination without fee or reward. In him students, too, have lost a warm and kindly friend. Old and young, nine out of ten architects in Dublin feel they have lost a dear friend.

The personal character of Sir Thomas Drew was marked by extreme uprightness and a very jealous regard for the honour of the profession. Although gifted with great tact, urbanity, and persuasiveness, and an ideally firm chairman of a meeting, he was at times—on very rare occasions—a little hasty. He then occasionally spoke before he thought. Absolutely fearless, he did not care who was offended at his outspoken comment if he thought it deserved. But if he ever showed a little heat, it was as quickly over. Like all men of strong and assertive character, he was very thoroughly staunch in his friendships, and never, on the other hand, dissembled his dislikes. Like all such men, he possessed a little of what Whistler has called "the gentle art of making enemies"—but in his case they were few and far between, and seldom remained such for long.

A characteristic recollection of Drew recurs to memory. Drew was consulted by the authorities of a certain new church which had begun to display very serious constructional defects; and he, without mincing words, commented thereon in a pretty strongly worded report, but before posting it, he as a matter of professional courtesy sent the draft to the architect involved, who called on Drew at once, and with more courage than wisdom desired to know for what pecuniary consideration the report might be modified! The exact reply is not recorded, but it had intimate reference to alternative modes of egress from the room.

Another experience of his, in somewhat similar circumstances, happened when two or three alternative designs were submitted to him for advice. Again he commented somewhat severely on the weak construction of a roof. The indignant author called on him to offer remonstrance. "I can't understand your criticism," said he; "and between ourselves," he added, "I don't mind telling you I copied that roof from an example in Viollet-le-duc. Have you got the book here?" The volume was duly produced, and opened by the author of the design and triumphantly handed to Drew. "Did you read what was under it?" asked he. "No," replied the architect, "I'm not a good French scholar." "Well," said Drew, "it says underneath, 'Example of weak construction to be avoided'!"

He was a collector of antiquities, possessing a number of old miniatures, including several by Comerford. He had also a good collection of Waterford cut glass, and several beautiful Georgian mantels. Another old mantel, now in his office, was rescued from the old home of the Mornington family in Great Britain Street, Dublin; the house which was the family residence before they migrated to 24 Upper Merrion Street (where the Duke of Wellington was born) has since been demolished.

Sir Thomas had been suffering from his old enemy, gout, for some time, but about Christmas last he became quite strong and well again, and returned to work vigorous and alert as ever. His last public act was when he appeared on the platform on the occasion of the opening of the Irish Art Students' Exhibition in the Hall of the Civil Engineers in Dawson Street a couple of months before his death. A few days later he was seized with sudden illness, and his medical advisers found it necessary to perform an immediate operation. For this purpose he was removed to the private hospital in Lower Mount Street. From the effects of the operation he appeared to rally satisfactorily, and the reply to inquiries was that he was doing well. A week or so before his death, however, his malady took an unfavourable turn, and he passed away on Sunday, the 13th March.

In the *Evening Mail* of the following day there appears under the signature of "O." a touching little tribute to the memory of Drew and his lifelong friend William Mitchell, who preceded him into the great unknown by only a few hours. Those of the fraternity will discern therein the hand of Mr. Richard Orpen, an old and distinguished pupil of Drew, and the valued friend of Mitchell:—"There are grey days in the spring of the year when the pulse of Nature seems to beat feebly. Such a day is this, when we know that two lifelong friends, Sir Thomas Drew and William Mitchell, lie dead. We architects meet one another in the street, and there is real sorrow in our faces. Two of our leading men have stepped aside into the silence; men so intimately connected with our professional life in Dublin, members of our Council and past Presidents of our Institute. We their juniors are filled with a sense of the insecurity of things and count our own accumulating years. Our loss is too recent to permit us to appraise the splendid qualities of each. We walk the streets, busy with the affairs of the moment, for life must go on and the day's work be done, though our hearts contract within us; and, here and there, through the grey city—scourged by the March wind—we see the memorials of these two men whose drawing boards are to-day idle and whose T-squares have been hung up for the last time."

Dublin. ALBERT E. MURRAY [*F.*].

9 CONDUIT STREET, LONDON, W., 27*th August* 1910.

CHRONICLE.

Town Planning Conference, 10–15 October 1910.

The Royal Academy has generously placed its galleries at the disposal of the Royal Institute for the purpose of the exhibition of drawings and models illustrative of town planning.

Members are requested to make early application for membership of this important Conference, and to take all the means in their power to bring it to the notice of those interested in town planning, whether architects or laymen.

Ladies also are eligible for membership.

The Secretary-General will be happy to send additional copies of the Preliminary Announcement and form of membership to applicants.

All communications to be addressed to

The Secretary-General,
Town Planning Conference, R.I.B.A.,
9 Conduit Street, W.

Professional Conduct, &c.

The attention of Members and Licentiates is called to the following resolutions of the Council:—

1. That it is reasonable that an architect should sign his buildings in an unostentatious manner, similar to that adopted by painters and sculptors.
2. That it is undesirable for architects to exhibit their names on boards or hoardings in front of buildings in course of construction.
3. That a member having any ownership in any building material, device, or invention proposed to be used on work for which he is architect, shall inform his employer of the fact before their use.
4. That no member shall attempt to supplant another architect after definite steps have been taken towards his employment.
5. That it is desirable that in cases where the architect takes out the quantities for his buildings he should be paid directly by the client and not through the builder.

The Mortality in "Back-to-Back" Houses.

The Local Government Board has issued as a Yellow-book [Cd. 5314] a Report by Dr. L. W. Darra Mair on the relative mortality in "through"

and "back-to-back" houses in certain towns in the West Riding of Yorkshire. Dr. Arthur Newsholme, Medical Officer of the Board, in an introduction to the report, sums up the conclusions arrived at by Dr. Darra Mair. The inquiry, he says, has been extended to thirteen industrial towns in the West Riding. The comparison of the two types of houses has been limited to houses of good structural condition situated in healthy areas, and in order to avoid accidental statistical error the vital statistics have been taken for a period extending over ten years. The results thus obtained confirm on the whole the results of previous less complete inquiries. They show that even relatively good types of back-to-back houses, when compared with through houses, have a death rate from all causes which is 15 to 20 per cent. in excess of the death rate in through houses. This excess is not evident in back-to-back houses built in blocks of four, which, unlike those built in continuous rows, possess some degree of cross-ventilation. It is noteworthy, however, that in all back-to-back houses there is excessive mortality from diseases of the chest, like bronchitis and pneumonia, and diseases especially associated with defective growth and development of the young child. The statistics also show that the excessive mortality associated with back-to-back houses falls chiefly on childhood and old age. Dr. Newsholme points out that, so far as carefully compiled statistics can settle the matter, it is certain that even the best back-to-back houses are decidedly less healthy than through houses, and that their provision as dwellings for the working classes is undesirable. Back-to-back houses have lower rents than through houses providing the same accommodation, approximately in the proportion of 4*s*. 6*d*. to 5*s*. 6*d*. But the higher rate of rental is recouped in better health, and in the facilities for self-contained family life of a satisfactory character, which is ensured by having air space at the rear as well as in front of the house.

Town Planning and Modern House and Cottage Exhibition, 1911.

An architectural and building competition is being promoted in connection with a Town Planning and Modern House and Cottage Exhibition, to be held next summer at Gidea Park, Squirrels Heath, under the Presidentship of Mr. John Burns, President of the Local Government Board. Mr. H. H. Raphael, M.P., who some years ago presented to Romford the fine public park which bears his name, has offered a thousand guineas in prizes for the best designed houses and cottages erected in the Exhibition, and for a site plan and other designs.

The competitions open to architects are :—

Class I.—A Detached House, to cost £500 : First Prize, Gold Medal and £250 ; Second Prize, £100.

Class II.—A Detached Cottage, to cost £375 : First Prize, Gold Medal and £200 ; Second Prize, £100.

Class III.—For the best Internally Fitted Cottage in Classes I. or II. : Prize £50.

Class IV.—Town Plan of Gidea Park : First Prize, £100 ; Second Prize, £50.

Class V.—Garden Design for House or Cottage in Classes I. or II. : First Prize, £25 ; Second Prize, £10.

Class VI.—Perspective Drawing, suitable for reproduction of a House or Cottage entered for Competition in Classes I. or II. : First Prize, £10 ; Second Prize, £5.

The following competition is open to builders :—

Class VII.—For excellence of Workmanship and Construction in the Erection of a House or Cottage in Classes I. or II. : First Prize, Gold Medal and £100 ; Second Prize, £50.

The Directors of the Romford Garden Suburb will purchase twelve of the houses and cottages erected by exhibitors. Arrangements are also being made by which at least three-quarters of the cost of the erection of all competition houses will be advanced to competitors.

In recent years probably nine-tenths of the houses newly erected in the eastern suburbs of London would fall within the cost limit laid down for competitors in this Exhibition, and it is the desire of the promoters that the Exhibition shall set a standard of architectural design, and of internal comfort and convenience, which will do much to improve the growth of suburban neighbourhoods. The idea of the promoters is not to bring together a collection of "freak houses," but to discover what the best architectural ability and skill in the country can do towards the solution of the problem of houses and cottages at sums within the reach of people of moderate means. Mr. Raphael's generosity should meet with a wide response in entries.

Mr. E. Guy Dawber, *Vice-President R.I.B.A.*, Mr. H. V. Lanchester [*F.*], and Mr. Mervyn Macartney, F.S.A. [*F.*], will act as judges.

Designs in Classes I. and II. must be submitted not later than 31st October ; in Classes V. and VI. by 30th November ; in Class IV. by 31st March, 1911. The full conditions can be obtained on application to Mr. Michael Bunney [*A.*], Secretary of the Exhibition, 33 Henrietta Street, Strand, W.C.

Mr. John Burns on Garden Suburbs.

Mr. John Burns, laying the foundation-stone of the first house in the Romford Garden Suburb on the 28th ult., said they were inaugurating that day another link in the garlanded chain of garden suburbs that were surrounding the great metropolis of London. The object of these garden suburbs was an attempt to bring the town into the country and the garden into the town, and by a judicious amalgamation of both to secure, not only for the working classes, but for the whole of the people irrespective of class, something more tolerable, more decent, more beautiful, and more human than many of the collections of houses of all sorts

that had been dumped in and around London during the past hundred years. The garden suburb was something more than a new environment for a privileged section of the community. This movement was not confined to Romford, nor to Britain, nor to the continent of Europe. There was not a community of civilised people who wanted to be more civilised who were not thinking out, planning, scheming, and shaping the future of their houses, towns, villages, and cities on lines similar to this, and it was right that it should be so. He was soundly British in all his housing and architecturally domestic views. He was for the homestead against the tenement, for the house *versus* the flat, for the home against the barrack; and he was for the cottage, and for death to the institution. He liked the detached house, the separate garden, the private home with the collective playground. He believed we had nothing to gain, but had all to lose, by imitating Germany, America, and France in our domestic architecture and in our neighbourly relations.

Street Improvements in the City.

Mr. Frank Sumner, the City Engineer, refers in his annual report to the widening of Fleet Street, and says that the London County Council have agreed to contribute £200,000, half the net cost of setting back the 28 buildings still remaining. Considerable progress has been made in settling claims for the widening of Bishopsgate Street Without. Arrangements have been made for removing the projecting corner of Bishopsgate Street Within, so that at its junction with Leadenhall Street the thoroughfare could be widened to 33 feet. The building line of Cornhill at that spot is also to be straightened. The London County Council have agreed to contribute towards the cost. The widening of Tudor Street, begun in 1882, has been continued, and steps are being taken to widen Kinghorn Street. The widening of the eastern end of Gresham Street, between Basinghall Street and Coleman Street, and of the eastern end of Leadenhall Street, are under consideration. Notices have been served to effect a widening of Wood Street. The four ancient gates enclosing the parish of St. Bartholomew the Great have been removed, and compensation has been paid to the parochial authorities. The gates dividing St. Michael's Alley and George Yard, Cornhill, have also been removed.

Mr. Colton, A.R.A., on Education and Art.

Mr. W. Robert Colton, A.R.A., in a letter in *The Times* of the 17th inst. protests against what he considers the radically wrong aims of our educational authorities in regard to art matters, and the foolish expenditure of public money in encouraging the wrong side of the balance of supply and demand in art production. Dividing Great Britain into buyers and producers of art, he inquires whether we do not spend much stupidly on the producer, and little or nothing on opening channels for the outlet and absorption of the product by cultivating the masses. The money spent upon our vast collections at the British Museum, the National Gallery, and the South Kensington Museum, is not spent upon cultivating the masses. These institutions, Mr. Colton thinks, are more in the nature of Universities established before their time and at a period when elementary schools of appreciation are alone needed. That it is advisable to have moderate collections of art works in our capital city made up of single examples of all schools is not disputed. But if we propose absorbing a goodly proportion of the thousands of pictures by Old Masters existing in England and several-fold examples of all the foreign ones—enlarging and building new galleries as soon as the old ones are full—then we are spending the nation's wealth in a very mad and foolish way. Our national collections in London are so comprehensive that the acquisition of fresh examples might now be very well left to the benevolence of the private donor. But, on the other hand, the starved designers and workers in metal, pottery, textiles, lace, &c., should have the finest examples of design in their respective trades brought home to where they live and work, to such places as Birmingham, Sheffield, Staffordshire, Bradford, Ireland, and a hundred other districts.

Art teachers are produced by hundreds yearly. A few find work in producing more of their kind. Very many find nothing to do: a waste to the State of the individual, money, brains, and time spent. Designers are turned out that they may not produce their best, because the best cannot be sold by the manufacturer at a remunerative price.

Considering the other factor in the case—the necessary artistic public to buy the materialised design when it is put upon the market—this side of the question Mr. Colton contends that the Government entirely neglects. There is no organisation to produce those qualities in the mind of the public that will lead them to purchase, out of sheer love for the beautiful, those fine designs that are produced in pottery, metal, wood, and textile fabrics by the craftsmen of to-day. When the Government begins to think, it will begin to create a demand for the good work of the artist and designer. It will realise that the love of the beautiful is the panacea for half the vice that dominates mankind, that to attack grossness in its infancy by surrounding the budding mind with beautiful objects will be the means of creating a citizen that will, in his time, demand the beautifully designed article as a necessity of his existence. It will place in every district a small museum that shall be a criterion of taste. Built by skilled architects, adorned and decorated by famous sculptors and painters, it should contain the choicest examples, according to the trades of the district, and be a standard of taste in every particular. The cost of these small temples of art being gradually established might, Mr. Colton suggests, be entirely supplied from funds

released by the stoppage of the unnecessary craze for collecting works of ancient art as at present conducted, which is not on the basis of the beautiful, but on that of rarity. Government purchases, beyond those already indicated, should be of the finest examples of modern skill, that in due time will naturally become the work of old masters, so that an impetus may be given to modern production by skilled craftsmen, rather than that innumerable inefficient artists should be forced and thrown upon the world without any outlet for their productions. We may take many lessons from other countries in these matters. France spends very large sums in buying examples of modern French design in all branches of art, and distributes them over the whole country. And our neighbour finds this policy pays not only in encouragement to her craftsmen, but in the money she draws from visitors from all nations of the earth. Above all, by placing beautiful objects in close contact with the masses—in her streets and parks—she is always silently instructing them in æsthetics.

The Guildhall Crypt.

The crypt under the Guildhall was opened to the public for the first time on 8th August. The crypt measures 77 feet by 46 feet, and is 13 feet in height. It extends over practically the same area as the hall above, and is very similar in design. It is divided by a partition into eastern and western crypts, only the former being at present open. The eastern portion, which is divided into four bays corresponding to those of the hall, was probably used for ceremonial and the western half for domestic purposes.

Mr. Sydney Perks, F.S.A. [*F.*], the City Surveyor, whose recent Paper at the Society of Arts was rewarded by the Society's Silver Medal, states that the whole of the building was erected at one time. It was begun in 1411 and completed in 1425, the porch being added last of all. No discoveries of Norman work have been made. Everything found—including windows, staircase, and passages—helped to fix the date as the fifteenth century. The Roman remains now exhibited in the Crypt have for many years been stacked away like rubbish in a back yard, and until they were recently unpacked no one knew how fine they were.

The much-needed restoration of the eastern crypt (which was formerly almost hidden) has shown the shafting to be of blue Purbeck stone. Until quite recently it was used as a kitchen. The western crypt, which is believed to have collapsed during the Great Fire and to have been restored by Wren, is still used as a storehouse.

The eastern crypt, which is now open from 10 to 5 daily, except Sundays, is being used as part of the Museum. A collection of old coffins is being shown here, including one from Austin Friars, another from the Guildhall Chapel, with an inscription stating it to be that of "Geoffrey the Trumpeter," and some of Roman times, as well as Roman fragments of the well and other relics.

Mr. Sydney Perks in his Society of Arts Paper suggests that as next year will be the quingentenary of the Guildhall, it would be a suitable date for the restoration of the western crypt.

It is not unlikely that the Guildhall will be considered in connection with that portion of the King Edward Memorial which the Corporation will probably undertake on its own account, apart from the metropolitan scheme.

The British School at Rome: Dr. Thomas Ashby's Excavations in Malta.

Dr. Thomas Ashby, Director of the British School at Rome, in a letter in *The Times* of the 3rd August, gives some interesting details of the excavations which were carried on by the Government of Malta under his direction during the month of June at the well-known megalithic buildings of Hagiar Kim and Mnaidra.

The excavations, Dr. Ashby writes, had a twofold object. It was desired to ascertain whether, in the original excavations of both buildings in 1839 and 1840 and the supplementary excavations of the former in 1885, the ground plan had been completely discovered, or whether there were any additions to be made to it; and also, inasmuch as previous explorers had, unfortunately, almost entirely neglected to preserve the small objects, and especially the pottery, which it was obvious that they must have found, to see whether it were not possible to remedy the deficiency to some extent by the recovery of sufficient material, at any rate for the determination of the date of the structures.

In the course of ten days' work at each building, satisfactory results were arrived at in both these respects. It was found that in front of the façades both of Hagiar Kim and of the lower building at Mnaidra there was a large area roughly paved with slabs of stone. This was also the case at a building of a similar nature excavated in 1909 on the hill of Corradino, and seems to have been a regular feature. No further additions (except in small details) were made to the plan of Hagiar Kim; but at Mnaidra it was found that besides the two main parts of the structure there were some subsidiary buildings, which, though less massive, were of considerable importance; they were perhaps devoted to domestic uses, inasmuch as a very large quantity of pottery was found in them. It was also ascertained that the site for the upper part of the main building, which is undoubtedly later in date than the lower, was obtained by heaping up against the external north-east wall of the latter a mass of small stones so as to form a level platform, instead of by cutting away the side of the rocky hill upon the slope of which Mnaidra is situated.

In both buildings there were places in which the soil had not yet been completely cleared away, and chambers in which the ancient floors of pounded limestone chips (locally called "torba") still maintained their hardness after perhaps 4,000 years. It was here that small objects were found in considerable quantities—numerous fragments of pottery and of flint, but no trace of metal; the former corresponded absolutely with that found in the hypogeum of Halsaflieni (recently described in an interesting and well illustrated little

book by Professor T. Zammit, the Curator of the Valetta Museum), and in the other megalithic buildings of the island, so that it seems clear that Hagiar Kim and Mnaidra, like the rest, belong to the neolithic period. . . . .

A few examples were also found of the small stone pillars, often narrowed in the centre, which are common in the megalithic buildings of Malta, both in isolation and as supports to the coverslabs of the dolmen-like niches which are so important a feature in these buildings. In either case, Dr. Arthur Evans thinks, they must be treated as *baetyli*, or personifications of the Deity; and one or two small terra-cotta models of them were discovered in the course of the present excavations. A specially fine stone pillar, hitherto concealed by earth, more elaborately turned than any other I have seen in Malta, was found by us, serving as the support to a dolmen-like niche immediately within the lower building at Mnaidra, on the right. Dr. Albert Mayr, in his valuable book on "Prehistoric Malta," is of opinion that the round towers, of which some half-dozen exist in Malta, also belong to the prehistoric period; but in a trial excavation at Torre Tal Wilgia, near Mkabba, we were not able to find any evidence in favour of this supposition, all the pottery which came to light belonging at the earliest to the Punic period.

This is the second season in which the British School at Rome has had the advantage of being able to co-operate in excavation with the Government of Malta, and the public spirit of that Government in bearing the expense of the work deserves all praise. . . .

Painting Concrete Structures.

The oil-destroying properties of the alkali in cement have caused trouble in painting concrete, which can be overcome by a method described by Mr. Charles Macnichol in a paper presented to the American Society for Testing Materials last month. He used it successfully for some years and recommended it as simple and reasonable in cost.

The method consists in treating the cement surfaces with a solution of equal parts by weight zinc sulphate and water, applied with an ordinary bristle brush, after the cement is dry. If the precaution is observed of allowing forty-eight to seventy-two hours as a drying period, this treatment, Mr. Macnichol states, will render a cement wall as safe to paint on as an ordinary plaster wall. At his request Dr. A. S. Cushman prepared the following explanation of the chemical reasons for the success of zinc sulphate in such work:

"In regard to the scheme for painting concrete work with a solution of zinc sulphate in order to make the surface hold a paint coating, it is my belief that the zinc sulphate is very well adapted for this purpose owing to the fact that when zinc sulphate is brought into contact with the calcium hydroxide (hydrated lime) a chemical reaction results in the formation of calcium sulphate (gypsum) and zinc hydroxide (hydrated oxide of zinc). It is apparent from this that after the surface has become thoroughly dry again, it will contain within its pores a mixture of gypsum and zinc oxide. These materials have no bad influence on linseed oil and, in fact, are frequently used as paint pigments. The reason why such treatment should be necessary before applying a paint coating to the surface of concrete must be apparent to everyone. When Portland cement sets a certain amount of lime is set free in a hydrated condition as calcium hydroxide. This is a strong alkali, and tends to saponify the oil in the paint coating and thus destroy it. The work done by the application of zinc sulphate is to destroy this alkalinity, and change the calcium hydroxide into a mixture of calcium sulphate and zinc oxide. I do not know of anything that would answer this purpose better than zinc sulphate."

Another action taking place, and an important one to the painter, is the filling of the pores of the concrete, which prevents suction, thus keeping the oil paints applied from penetrating too deeply into the cement.

Moving a Church Tower.

The Times Engineering Supplement of the 17th August has the following item of news from Belgium: "The church at Bucholt, on the Dutch frontier, a Gothic building of the fifteenth century, has become too small for the continually growing population of the commune, and as the choir could not be lengthened it was determined to move the tower bodily for a distance of 9.30 metres, just as was done in the case of the Dam station at Antwerp. This work has now been successfully accomplished. The tower, which is 40 metres high, is of square section, measuring 10 metres on the side, and weighs nearly 3,000 tons. It was first raised 2 cm. in order to detach it from its old foundations. The track along which it was then moved was formed of double beams carried on five rails, screw-jacks being placed 35 cm. apart. The displacement of the structure was effected in eight days, and eight workmen were able to produce all the effort required to move it forward 2½ mm. at a time. On the first day the tower was moved 10 cm., on the second 43 cm., on the third 88 cm., and so on, the motion being imperceptible to the naked eye. The work has cost 350,000 fr., with 9,500 fr. for the new foundations. This is believed to be the first instance in which a building of such height and age has been moved."

Architectural Designs in Hoardings.

Mr. W. H. Lever, speaking at the dinner of the Billposters' Association on the 16th August, suggested that they should introduce architectural designs in their hoardings, and he expressed his intention to offer four prizes to be competed for next year of £50, £25, £15, and £10 respectively for the best bill-posting stations constructed from an architectural point of view.

Mr. Edmund Wimperis [*F.*] has been appointed Surveyor to the Grosvenor Estate in London, in succession to Colonel Eustace Balfour [*F.*], who has retired from the post.



Mosaic and Fresco by Pinturicchio at S. Maria del Popolo. The figure in Fresco, the background in Mosaic.

WALL DECORATION.

By F. Morley Fletcher, Director of the Edinburgh College of Art.

Read before the Edinburgh Architectural Association, 8th December 1909.

THE great increase of material and mechanical resources in these modern days seems to have brought bewilderment and confusion to decorative art rather than any corresponding advantage. No doubt the power of production to-day is greater than in past times, but so far the advantage seems lost in the misdirection of its use. In wall decoration especially is this confusion evident. With all our machinery, with all our schools, can one point anywhere to a single piece of great and satisfying modern wall decoration in all this country—to any work that will bear strict comparison with that of the great masters of the past? We have had in this country several masters of great decorative and imaginative talent. One thinks of the names of Gainsborough, Alfred Stevens, Rossetti, and others of our great painters who had the poetic talent, yet who left no great wall decoration in any of our national buildings or churches or great halls.

The reasons for this apparent lack are probably deeper than we can tell. Perhaps the conditions of our climate and national life are such that a different character of decoration is more suited to us—one more concentrated in form, used as points of enrichment giving emphasis to large reposeful surfaces, rather than the diffuse decoration of great spaces suited to other national ideals. Perhaps the reason is simply that a proper technical method has not yet been found that will satisfy the conditions imposed by our humid climate and the impure atmosphere of our cities. In either case it is evident to all who have studied the more modern attempts at mural decoration that the technical problem is not solved; that good work has been spoiled or lost for lack of craftsmanship; and that a true technique must be found before real progress can be made in this branch of Art.

It is the purpose of this Paper to inquire what are the principles that should be observed and kept in view in the search for a method suited to our modern conditions, and for the future development of a School of Decorative Painting in which personal expression may have the utmost freedom, subject only to the control of a true principle.

In contemplating the carrying out of a definite scheme of decoration, the considerations that must simultaneously present themselves to an artist are those of Material and Treatment. The materials to be employed and the style or manner of treatment are equally involved in their relation to the architectonic necessities of any given work. The first decision as to both Material and Treatment must satisfy the elementary æsthetic principles or canons of workmanship relating to the work in hand.

In mentioning æsthetic principles, the objection may be raised that æsthetic principles, like the so-called laws of Beauty, are incapable of precise definition. No doubt this is true as to a fixed law or definition of Beauty. Beauty is a name for the realisation of a perfect harmony—a condition or state rather than an action. It is only with action or with Art that we can state rules of cause and effect. So it is only as we touch and handle tools and materials in art that we can find any definite and fixed rules or principles of workmanship. But these are clear and definable. The right or wrong principle may be tested and tried by action and result. In all the Arts canons of workmanship are known and accepted in the work of the true Tradition, though to many artists the knowledge is one more of instinct than of intelligence, and the rules are perhaps too rarely stated.

One great established principle relating to wall treatment demands that in the decoration of a wall the sense of the flat surface shall not be lost; that however elaborate the enrichment of the design, the sense of illusion shall never be given to an extent that would appear to destroy the fact of the flat wall. It is the same fundamental principle or rule that insists, in the enrichment of an object, that its essential character shall be emphasised rather than lost or disguised. This principle is familiar to us all, yet how often is the consideration of it neglected in our wall decoration, and especially in the choice of material for such work? Not only in our own time, but in all times of the great periods of decorative art one sees the frequent tendency to fall away from true decoration of surface to the meretricious effort to produce illusion of reality and so destroy rather than decorate the wall. Examples of this may be seen in Roman as well as in later European art.

Whatever then be the particular material chosen for use on the surface of the wall, it must be of a nature to harmonise with the fabric of the wall rather than to conceal or disguise it. It should not be necessary to cover up the wall with a foreign material before commencing to decorate it. The most true decorative method will be one that uses rather than conceals the wall. It may be contended that some of our modern wall coverings are a necessary clothing of a wall prior to its decoration. In the case of domestic rooms, with the need of continual renewal and ever-changing tenancy, this must be admitted to be so; but here it is a question of renewal and change of surface for the sake of cleanliness and the individual taste of successive tenants, and not a case of permanent or monumental wall decoration.

A common practice in the permanent decoration of public buildings is to cover the walls with canvas upon which the decoration is painted either before or after the canvas is placed on the wall. This at the best must be admitted to be only a convenient makeshift and not a method satisfying in the simplest way the primary conditions of artistic treatment. The canvas is not a durable material used under such conditions, and is in its nature foreign to the substance of the wall.

One might elaborate to a great extent instances of breach of the elementary principle of true and direct treatment in wall decoration without finding any clue to a solution which should

indicate the perfect method. We can no longer have recourse to the simple means of the old masters of fresco painting, for these have been proved dangerous in our humid climate and smoke-laden city atmosphere. If, however, we examine the best results of modern methods of work, keeping in view the principles of the true tradition, we may find ultimately an indication of the sure direction for research and experiment that will lead to a method suited to our modern conditions.

First among the notable examples of modern work that would seem worthy of our consideration are the great decorations of Puvis de Chavannes. The collection of decorations on the walls of the Pantheon in Paris affords a unique opportunity for study and comparison of various styles, both in method and treatment. Chief among them are the pale decorations of Puvis de Chavannes, showing the life of Sainte Geneviève, patron saint of Paris, rendered in delicate tones carefully limited in range as well as in power of colour, so that they harmonise perfectly with the severe stone interior of the solemn building. They have a pale beauty that is akin to that of the decoration by Perugino in the National Gallery in London. Near to them is the great dramatic painting of the death of Sainte Geneviève by Jean Paul Laurens, covering three divisions of a large wall with a representation full of intense human interest ; yet, seen from across the building, its dark masses do not decorate, but rather blot and obscure the stone which one feels to be covered up and hidden under the oil-painted canvas. On another side of the building the terrible realism of the execution of a saint, by Bonnât, turns the recess in which it is placed into a chamber of horror. No sense of enrichment of a wall remains, only the vivid picture of a scene of murder.

Without question the work of Puvis de Chavannes is pre-eminent in its beautiful selection of tone and colour and its obvious harmony with the spirit and architectural intention of the building. On closer examination one finds it to be painted with solid oil paint, rendered dull on the surface by means of a wax medium, and on a canvas ground which has been fixed to the stone wall. It is here that one questions the character of the method and workmanship. The fixing of the canvas is a convenience to the artist, but is not called for by the wall which it conceals ; nor can its material satisfy strict conditions of soundness and durability. The method has still other objections when it leads to the possibility and actual practice of painting the decoration away from the building and under other conditions of lighting, as has been the case in M. de Chavannes' later work for the decoration of the Boston Library. These decorations were entirely painted in Paris, on canvas, without the artist having seen the building for which they were destined. Here both æsthetic and material interests are in danger.

It follows from these considerations that although one must allow the fullest admiration for beauty and fine treatment to the work of Puvis de Chavannes, yet the methods employed do not strictly satisfy the requirements of artistic principle on the material side.

In another respect the use of a canvas covering for wall painting entails the loss of a decorative quality, especially when the canvas is solidly painted over, as in the case of the Pantheon decorations. Under this treatment one loses the harmonious luminous quality which should be a property of the wall itself rather than an illusory effect obtained by loaded lights.

In the Vatican frescoes by Raphael one never loses the sense of the luminous wall, telling everywhere through the painted decoration. In the Pantheon decorations, although the tones chosen are most harmonious, yet there is a sense of the loss of the wall's own luminosity under the super-imposed opaque coating of solid paint. This necessity of retaining and using the luminous power of the wall I believe to be of the first importance in decorative wall-painting. It is a most conspicuous quality in the best of the old masters' work.

Another noteworthy example of modern decoration is the work in South Kensington Museum by the late Lord Leighton—the two lunettes filled with designs representing the Arts

of Peace and the Arts of War. These beautiful designs are carried out by a modern method, named the Spirit Fresco method, by which the colour, while rendered fluid by a spirit medium, is laid on a porous surface, and is at the same time slightly protected by wax. But the surface of the wall remains dry and absorbent, and the work is subject to all the varying influences of moisture, dirt, and acid gas in the London atmosphere. The colour has already faded considerably in the few years that have elapsed since the work was done, and the surface has shown signs of disintegration. Otherwise the decorative character of these frescoes is entirely satisfying, and they are of a true and scholarly tradition. Their only element of failure is in the fact of their inability to resist the dangers of our climate by reason of their exposed surface. How great these dangers are, and how penetrating is the acidity of a city atmosphere, will be realised by consideration of the fact that Professor Church, in examining the exterior limestone of St. Paul's Cathedral, found the limestone to be changed to sulphate of lime to a depth of three-quarters of an inch by the action of sulphurous acid in air and rain. Although in an interior there is protection from rain, there is still the similarly dangerous circumstance of condensation of moisture consequent on sudden changes of temperature.

Neither the painted canvas nor the spirit-fresco method has therefore provided us with a sure means of work. The examples cited and other modern decorations of great and notable achievement, such as those by Mr. Sargent for the Boston Library, still leave us uncertain as to the soundness of their method, and unconvinced that the proper solution has yet been found. Many other media and special preparations of pigment have been invented and are offered by the manufacturers of artists' materials, some having obvious advantages ; but, good and useful as these are, they meet only part of the main requirements of our case.

The failures or difficulties of modern materials have driven many artists to revert to the old methods of pure fresco as the only solution of the modern problem. Some examples of modern work of this kind are shown this evening. It is contended that they are standing our climate satisfactorily ; but so long as coal and gas are burnt in our cities there must be the continual impregnation by acid and consequent disintegration of surface as the lime becomes inevitably decomposed and the surface gradually powders away. For these reasons the revival of fresco and tempera is of doubtful value.

In an experiment nearer home the difficulties with which we are faced have been more frankly met, and appear to be to a great extent overcome, in those remarkable examples of modern decoration in our own city carried out by Mrs. Traquair. Open as these decorations may be to individual criticism, yet they are without doubt a great achievement, and satisfy in a remarkable way many of the most difficult conditions presented to the modern decorator. They are, by virtue of the nature of the materials used, of great durability, and should prove to be immune to the dangers of our climate and atmosphere. They may be safely and freely washed and their protecting surface of wax may be renewed from time to time.

The following are notes given me by Mrs. Traquair of her method of work and of the preparation of the walls:

(1) A good plaster ground was prepared, then successive coats of zinc-white were given, thinned very much at first with oil and turpentine—almost no zinc in first coats—four or five coats given in all.

(2) The painting was done on the solid zinc-white ground,—the colour used being ordinary oil colour in tubes, thinned by a medium of beeswax dissolved in turpentine,—about one teacupful of beeswax shavings to a pint of turpentine. The lights were got by wiping with a rag, no white paint being used.

(3) The finished painting was varnished with good copal carriage-varnish.

(4) A wash of wax and turpentine was put over all the varnished surface and rubbed by hand with a cloth to a dull eggshell polish.

A careful examination of the work in the Catholic Apostolic Church and in the Mortuary Chapel of the Sick Children's Hospital strengthens the conviction that the methods employed are, in the main, very suited to the conditions of our modern life.

There is confirmation of the value of the protecting surface of wax, laid on and polished by hand, in the description given lately by Principal Laurie of the methods employed by the Greek sculptors and decorators in similarly protecting the painted surfaces of their statues and temple walls. Perhaps in detail the method might be simplified or varied, but the main points essential to true decoration seem to be well fulfilled, namely :

(1) The wall is prepared with a durable and luminous surface of a very impervious character, thus protecting the work from dampness from within the wall.

(2) In applying the paint the luminosity of the wall surface is retained and used in modelling the forms of the design. The lights are obtained from the wall itself—never by loaded paint suggesting an illusion of light unrelated to the wall's surface.

(3) The surface of paint is covered with an impervious and renewable protective material that in itself has a quality of decorative value.

(4) The work is executed *in situ*.

Whether the problem is entirely solved will only be decided by time and further experiment, but there seems to be a strong probability that in respect of material and method of work these decorations will prove a most valuable example.

In accepting any technical method of Art work one is thereby committed to conditions that affect or limit the scope of æsthetic treatment. If we accept a method of the character just described, then the æsthetic treatment of our work must be such as to satisfy the material and physical conditions that are involved. In the first place the work will need to be scarcely less direct than work in " buon fresco," for, if modelling in light and shade is to be obtained by means of the white ground of the wall, a free and direct technique will be necessary that will allow of little repainting. As in fresco work a second painting will need to be avoided wherever possible, or luminosity and freshness will be sacrificed.

On the other hand, the painted and waxed surface will allow of intenser tones than are possible on the more dead surface of the fresco wall, and consequently an extended range of values. Exquisitely beautiful as are the cool frescoes of Italy in the welcome contrast they afford to the intense life and colour of the street and town, yet here in our country of more restrained and greyer skies the power to extend and deepen the range of colour values would seem a fitting advantage ; so that although our conditions of life and climate may compel us to use a method lacking the lightness and delicacy of Italian fresco, may it not be that when we find our proper technique it shall prove to be one nevertheless of richer power for expression of form and colour, and capable of a strength and beauty that shall correspond to our own northern qualities of ever changing light, and its severe contrasts of deep and tender tones ?

In the furtherance of this search and in the development of a school of decoration in Edinburgh, great help and co-operation will lie in the power of members of this Association. When the signs of life appear in examples of sound experimental work we trust that both welcome and opportunity will be given by the architect members of this body.

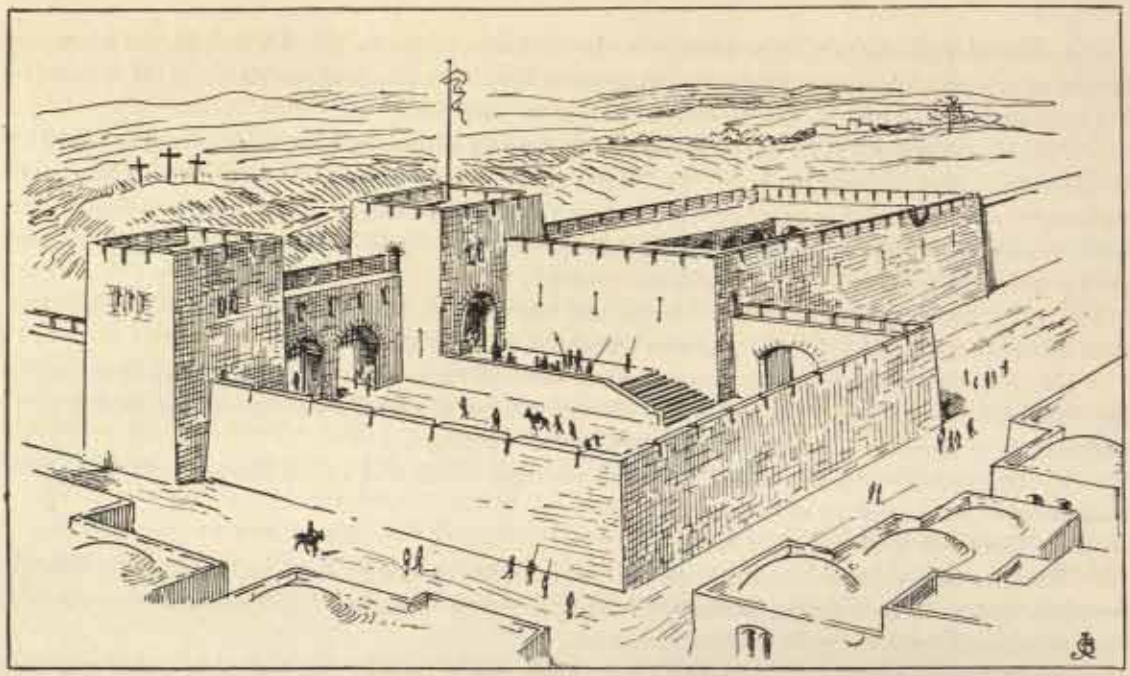


Fig. 8.—Imaginary Bird's-eye Sketch of the Holy Sites in A.D. 33.

THE CHURCH OF THE HOLY SEPULCHRE, JERUSALEM.—II.

By Geo. Jeffery, Curator of Ancient Monuments, Cyprus.

[*Continued from p.* 729.]

DESCRIPTION OF THE REMAINS EXISTING ON THE SITES OF THE ANASTASIS AND THE MARTYRION.

Classification.

Pre-Christian.

Traces of the city wall of Jerusalem and of fortifications, &c.
Tombs of Jewish character.

Pagan Remains [Christian Era].

Possible evidences of the Temple of Venus, traditionally said to have occupied the site during this period.

Ancient Christian.

The buildings of the fourth century [*c.* 333].
The restoration of the buildings by the Patriarch Modestus after the Persian and Jewish destruction of Jerusalem [*c.* 628].

Mediæval Christian.

Byzantine rebuildings after the ruin caused by the Khalif El Hakim [*c.* 1000].
Buildings of the Latin Crusaders [*c.* 1130].
Additions by Emperor Frederick II. [*c.* 1225].

Arab Custody.

Repairs of the fifteenth century.

Turkish Custody.

Repairs of the sixteenth century.
Rebuildings after the fire of 1808.
Alterations during the nineteenth century.

PRE-CHRISTIAN.

Traces of the Ancient Fortifications of the City.

THE traditional site of the crucifixion and entombment of our Lord occupies a plot of land which is apparently bounded on the south and east by remains of the city defences, which are certainly much older than the fourth century.

In describing these remains of walls of a remote age, it must be remembered that they cannot be precisely identified either in age or use, because they are without any architectural features. The methods of masonry construction adopted in the Levant have remained remark-

ably unchanged throughout the ages. The huge stones with a simple drafted edge, leaving the face in the rough, are common to the primitive builders of the " Haram area " (site of the Jewish Temple) as much as to the Crusading masons of thousands of years later. Also the method of building the city walls at different periods has remained practically the same, the masonry tending to become a little smaller in cases where rebuilding has taken place and the stones have been reshaped to fit their new positions.

On the south side of the site a considerable length of the city wall lies buried beneath the accumulations of débris and the later buildings covering the area known during the past few centuries as the " Muristan." It was traced by Schick and others during the various alterations which have been carried out by the Germans and Greeks during the past quarter of a century on this site, and, although it was never very accurately noted at the time, the lower courses of the structure still remain below the level of the new German church and the Greek bazaar. This wall runs in a direction east and west, parallel with the south side of the Holy Sepulchre Church on a line passing through the foundations of the new German church (built on the site of S. Maria Maggiore).*

The traces of a fortified enceinte on the east side of the Holy Sepulchre are very much more complicated with later alterations than the southern wall, and they have afforded a deeply interesting problem from many points of view. Herr Baurath Schick, of Jerusalem, who devoted so much of his time to the elucidation of archæological difficulties in the Holy City, was perhaps most successful in what he did for the Christian antiquities. Herr Schick was employed during his long residence in Jerusalem of some fifty years as sanitary engineer to the " medjlis " or town council. He also prepared very complete and careful plans of the Holy Sites for the Russian and German Palestine Societies, and being constantly on the spot whenever anything was discovered during the progress of alterations in the centre of the city he was able to amass a vast amount of information. The area on the east side of the Holy Sepulchre Church was laid bare to a considerable extent during the eighties of the last century by the Russian Palestine Society, which had obtained possession of a convenient corner of the premises for the erection of a large new hospice or hotel for pilgrims. This area on being freed from the squalid tenements and hovels which always cover any ancient site in the East revealed the presence of most interesting fragments of buildings which had been completely lost sight of. Herr Schick was induced by these remarkable discoveries to make elaborate plans of the property, and to construct (or perhaps finish the construction of) a large-scale model of the Holy Sepulchre Church, with its surroundings, in wood—the different proprietorships of the premises being shown by painting the model in various colours. This very valuable record of a period now passing away is preserved in the Anglican College, Jerusalem.

According to Herr Schick's investigations the site of the new Russian church was a rock platform which, with its fortifications, had formerly constituted the guardhouse of the Roman garrison at this point of the city—a defence as much against the turbulent citizens within the wall as against the enemy without. The position of such a mural fortification is reminiscent of the great Pretorian Camp on the Aurelian wall of Rome, or of the usual position of a mediæval citadel in relation to the city for which it served as a defence. Jerusalem appears to have been provided with more than one of these Pretorian camps for the use of the Roman army of occupation.

The traces on the site—*i.e.* the scarps and rock levels as far as they could be traced by

* Apparently the only attempts to record the appearance of this wall are certain references to it by Herr Schick at different times in the *P.E.F.Q.S.*, and a view of it taken from a drawing made when the Greeks were rebuilding their bazaar in 1905. Selah Merrill (U.S. Consul) reproduces this drawing at p. 297 of his book, *Ancient Jerusalem*, published in 1908; he does not, however, mention how the drawing was made or by whom.

Herr Schick at various times in the course of many years, whenever his professional employment connected with the cisterns and drains within this area led to such investigation—induced him to form the following opinion.

The wall, traces of which have been distinctly identified at different points within the foundations of the new German church and the new Greek bazaar, appears to be a primitive enceinte wall of ancient Jerusalem running east and west. In a line, corresponding with the present "Suk-el-amud," Herr Schick thinks that the enceinte of the city at the period of A.D. 33 continued from this primitive wall in a direction due north, thus forming a right-angled recess in the city defences at this point. A city gate, of special plan and importance, was situated within this re-entering angle of the wall, and forming an additional defence to the gate on its north side stood the large square enclosure or tower of the Pretorian camp. As already remarked, this camp was intended to withstand any attack from the city side as well as from the open country, and for this purpose the gateway seems, according to Herr Schick's theory, to have been planned in the shape of an elbow or of an L form, enclosing one corner of the camp and having two doorways, one fronting the country and the other facing the city, both of which could be closed in the event of any fear of the population within the city uniting with the enemy on the outside against the "army of occupation." (Fig. 9.)

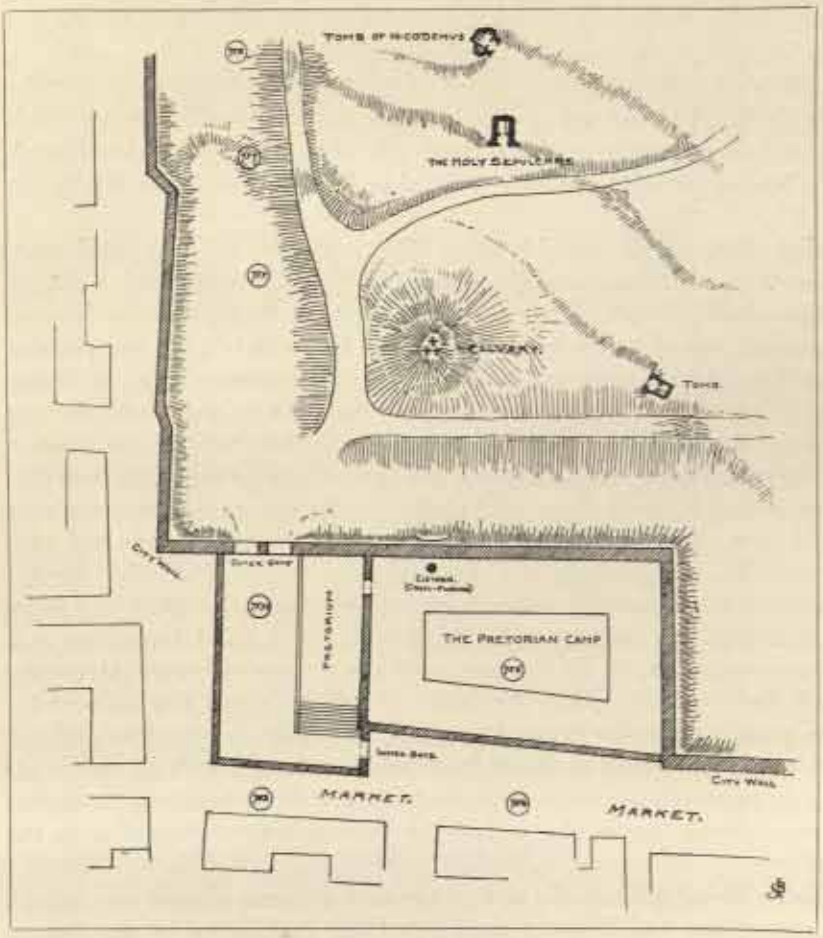


FIG. 9.—Plan of the Holy Sites deduced from the remains *in situ*.
Scale $\frac{1}{1000}$. Rock levels in metres above the sea.

The evidences for Herr Schick's theory—the theory which seems also to have been endorsed and adopted by the Russian branch of the orthodox Church—are based on a consideration of the rock contours and levels, as they remain in a much mutilated condition at the present day. Unfortunately, the site has been much changed in subsequent ages: first, by the monumental buildings of the fourth century; secondly, by the immense cisterns which have been formed all over it in later times.

An inclined plane, rock-cut, leading up to this rock platform of the supposed Pretorium

on its south side from the street level on the west, seems to have been formed to receive a flight of stone steps, and one of the ancient steps still stands *in situ* on the top of this ramp.

The rock platform above described is at about the same level as the rock platform forming the floor of the Mount Calvary Chapel within the Church of the Holy Sepulchre, and also of the general rock level of Christian Street. The ground slopes in a direction from west to east, in the same way as it does at the Damascus Gate, but its exact limits on the north side are at present unknown.

There has always been a tendency to attach importance and value to any kind of ancient object which is found during the progress of alterations in Jerusalem. These remains, found by the Russians towards the end of the last century, attracted intense interest, and as is usual in such cases conclusions were drawn which have since become articles of belief with many persons, although there is little, if any, proof to be adduced in the matter. The Russian ecclesiastical authorities seem to have decided that the rock platform, with its inclined plane for steps, is the actual stage on which Christ was tried before Pilate, and the scene of "Christ before Pilate in the Pretorium" is represented in a large and quaint painting with life-size figures on a wall of the church which now covers the Holy Site.

TOMBS OF JEWISH CHARACTER ON THE SITE.

These tombs may be classified as follows :—

(*a*) The Holy Sepulchre.

(*b*) The traditional tomb of Adam, forming the hillock of Calvary.

(*c*) The tomb of Nicodemus, a much mutilated tomb of the "kokim" variety, investigated with great elaboration by various writers in the *Palestine Exploration Fund Quarterly Statement* for 1877 (several Papers).

(*d*) The "Prison of Christ," possibly a tomb which had been almost entirely destroyed as far as its character is concerned. This chamber could hardly have been a cistern as has been suggested, as it stands at too high a level for such a purpose. Certain traces of graves are said to have been detected in the rock area not far from the north-east corner of the "Prison."

WATER CISTERNS ON THE SITE.

The area covered by the buildings of the Holy Sepulchre is broken into all manner of irregularities by innumerable cisterns which have been cut from time to time, partly for collecting water and partly for quarrying purposes. Many ancient vestiges have naturally disappeared under the circumstances. The most ancient of these cisterns is the famous "Cross-finding" Chapel, which is referred to in the first historical accounts of the mediæval period—*e.g.* Arculfus. The holes in the rocky roof of this cistern are mentioned by Quaresimus (*Elucidatio*) as evidently used for buckets, and this idea has been advocated by the supporters of a theory as to the rock platform above being the ancient Pretorium.*

PAGAN REMAINS.

Every possible trace of the use of the Holy Sites for Pagan purposes has, of course, utterly disappeared. This would be but necessary under the circumstances.

During the excavation of the south-east corner of the site by the Russians, a curious

* Cistern of the Cross-finding. *Ord. Survey Notes*, p. 54. "Of irregular shape, hewn out of the Malaki bed, with the overlying Misse left as a roof, one of the most ancient types of cisterns."

fragment of inscription, evidently from the frieze of some public building, was turned up. It is the usual commencement of an Imperial dedication—

IMP. . . . .
PART. . . .

in two lines of finely cut letters of the second or third century.

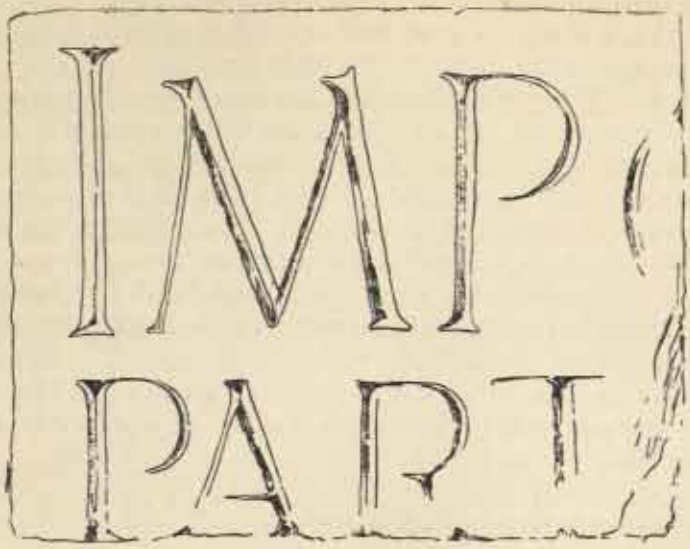


FIG. 10.—Fragment of an Imperial Inscription found on the site of the new Russian Church adjoining the Holy Sepulchre.

The Russians have carefully inserted this fragment in the wall of their church, and there are not wanting enthusiasts who can imagine this to be one of the usual dedications beginning—

IMP . CAES . DIVO . TRAIANO
PARTHICI . &c., &c.,

set up by the Emperor on the temple erected here according to the Christian legend about the period of Hadrian or Trajan.

ANCIENT CHRISTIAN.

THE BUILDINGS OF THE FOURTH CENTURY.

Fragmentary and much mutilated traces of the great monument erected by the early Christians on the Holy Sites can alone be discovered at the present day. These fragmentary evidences are chiefly in the form of rock-cut outlines and foundation walls, which serve, to some extent, to elucidate the accounts written by early pilgrims. In as far as they agree with each other, such traces and early descriptions taken together give a fairly exact and conclusive idea of the plan and arrangement of the monument at the period in question. (Fig. 8.)

The method of building in vogue during the later Roman Empire, and especially in its provincial style, may be studied at Baalbek. The later portions of the stupendous temple may be considered almost contemporary with the buildings of Jerusalem, and the mason craft would probably be identical. This mason craft is characterised by the effort to employ the largest masonry possible, and, as a consequence of such a large scale, the stones are, as a rule, placed in position without being completely dressed to the face of the wall; a finished surface was obtained when the building was completed and there was no further danger of injuring the stones during transport and handling. In some cases, as in the entrance façade at Baalbek, the stones (which have never been treated as finished work) have squared faces, but the edges are protected by a projection of 2 or 3 inches, which was to have been cut off when the façade should be finished; this façade, however, never was finished.

In recognising Christianity as one of the religions of the Empire, the Roman Government appears to have permitted the erection of sumptuous buildings in the customary way. No record remains of how or by whom they were planned; few names indeed of any architects of the Roman Imperial period have reached us with certainty, and, although we have many descriptions of these buildings, and even a mosaic picture evidently representing them, still

the information upon the subject is far from complete. In other words, we have none of that official information which is always desirable.

The surviving evidences of the Roman buildings of the Holy Sepulchre on the site are as follows :—

(*a*) The plan of the Rotunda or Anastasis (Church of the Resurrection) as defined by the circular rock-cutting on the west side.

(*b*) The " monticulus " of Calvary (Golgotha), which was also formed into a rock-hewn monument by the Romans.

(*c*) The east front of the " Martyrion " basilica, of which the lower courses of stone and its three doorways are fortunately preserved.

(*d*) The Madeba mosaic.

(*e*) The evidences derived from contemporary monuments, such as the apse mosaic of the Church of St. Pudenziana, Rome (the present writer was the first to suggest this identification, see *Quarterly Review*, 1899), the Trivulzio diptych, and other ivories of about the same period [figs. 1–5, Part I.], which all possess a precisely similar character in design and detail in the effort to represent the Holy Sites.

(*a*) The remains of the Anastasis are indeed scanty. The outline of the enclosing wall—which outline appears in the earliest known copy of a plan—is only to be traced with difficulty in the rock-cut floor of the south-west quadrant of the Rotunda. All that we can assume is that, as the rock-cutting suggests a circle in accordance with the earliest descriptions of the place, the traces which remain at the present day are the actual foundations of the encircling wall of the fourth century.

The rock-cut Holy Sepulchre is, according to many past and present authorities, now reduced to a mere mutilated fragment of rock, the upper portion of the little cubicle which the fourth-century stone-cutters left standing in the midst of the levelled plateau having subsequently been demolished.

No architectural detail or fragment survives of the fourth-century Anastasis.

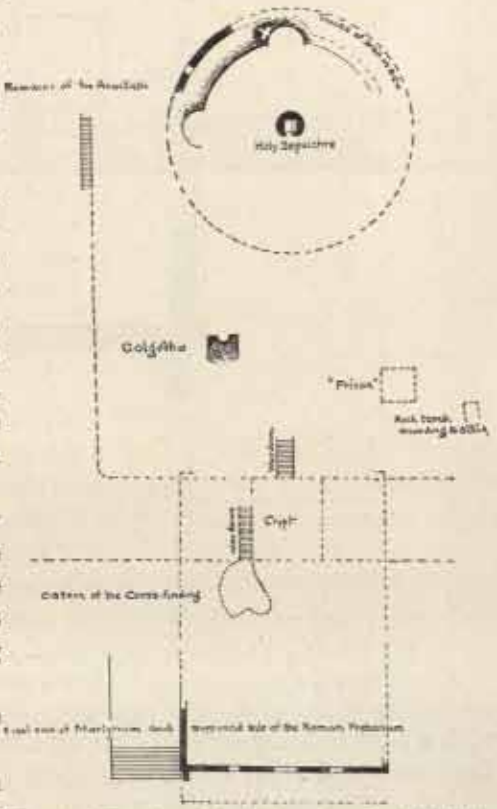


FIG. 11.—Remains of the fourth century *in situ* 1910.

(*b*) " Mount Calvary," which owes its designation and present form to the Romans of *c.* 333, has perhaps suffered less from subsequent damage than any other portion of the remains of primitive times. If this little rock-cut chapel was originally a tomb, it has undergone a great change by being excavated and enlarged within to its present dimensions, but it is, of course, impossible to say how far the rock extends as a covering to the chapel ; the apse of the chapel is perhaps a mere niche in the rock face, and was never anything more.

(*c*) The east front of the Martyrion or Memorial Church is the most interesting relic of the period now extant. Until the Russian Palestine Society commenced its explorations on the site during the eighties of the past century, this venerable relic was completely lost to sight, and a record of its existence seems to have survived only in the primitive descriptions, and in an assumption that the granite columns which have been found on the same side of the bazaar

formed part of its decorations. These granite columns were first brought to public notice as the "Propylæa," by Schultz, in 1845, and made to do duty as the remains of the ancient "second" wall of the city * (see Robinson, vol. iii. p. 168).

The ancient east front of the fourth century has, however, no very clear connection with the columns, and it seems more than probable that this colonnade has been added to the façade at a subsequent period.

The three or four courses of large stones which are exposed to view in the Russian church and in the adjacent wood store stand on the rock platform in a somewhat clumsily built manner, the inequalities of the rock made up with smaller stones, and evidently the whole is constructed

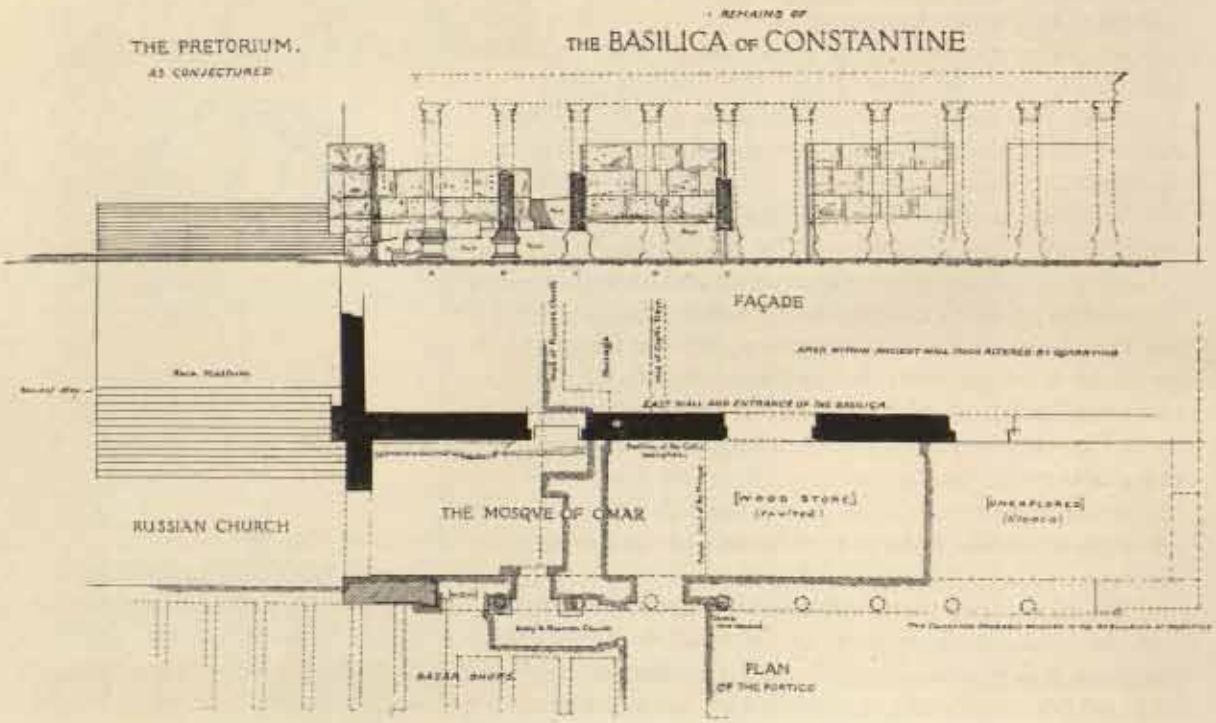


FIG. 12.—Plan and Elevation of all the remains *in situ* at the east end of the buildings of the Holy Sepulchre. Fourth to seventh centuries. Scale $\frac{1}{350}$.

with a view to being covered over by a veneer of marble, or in some other way. A sunk face on the stones and other indications show that the stones were to be dressed after they were in position. The southern doorway, which also shows in the Russian church, has this peculiarity, that either it is of subsequent formation, or it has been covered with a marble architrave—in other words, it is now a mere hole in the wall some 8 feet or 10 feet wide; it is, however, rebated for a door and provided with a cill.

In the plans of the remains prepared by the present writer for publication by the Russian P. E. Society, in 1897, the central doorway of the façade was shown (as inferred) in the position where it has since been discovered (1907) during the process of rebuilding the Coptic convent on the site. Its dimensions and position are shown on the detail drawings of the front

* The "Khan ez Zeit," "oil market," or Suk el Amud, takes its latter name either from the rows of columns with which the market-place was lined, or from a great column said to have stood in the open space within the "Gate of the Column," Bab el Amud. Both Willis and Schultz speak of the "Suk," east of the church, as "deserted" in their time (nineteenth century).

(*vide* illustration fig. 12), and a detail of its moulded architrave (fig. 13). It is somewhat puzzling to find this doorway existing with a moulded and carved architrave executed in the stones of the wall, whilst the side door, as above described, if contemporary, must have possessed a marble door lining.

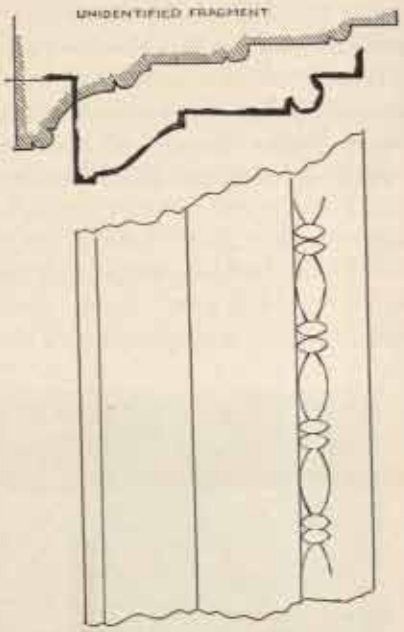


Fig. 13.

The base of the wall, which has been brought into clearer evidence within the last few years, is certainly occupying the position of the east front of the fourth-century basilica, as shown on the mosaic of St. Pudenziana and as described by St. Sylvia of Aquitaine; the only question which arises is whether the stones we now see are the base of the original fourth-century monument, or of some later rebuilding (fig. 13A).

The problem presents itself under so many different aspects that perhaps we may consider it one of the most perplexing puzzles in archæology.

1. In the first place, the rock platform on which the wall stands has the appearance of having undergone great alterations subsequently to the erection of the wall—alterations which are so unaccountable and confusing as almost to baffle speculation. For instance, the great central doorway, on being discovered in 1907, proved to be without a rock cill as far as was observed, and the area within this doorway (westwards) appeared to be of a much lower level than the rock platform within the Russian church. Here there had been cellars under the Coptic convent, and within them were disused cisterns or mills for some primitive manufacture. This area was, unfortunately, not explored with any intelligent supervision—in fact, it was merely turned over by the ignorant occupants of the Coptic convent, whose object was to rebuild their premises in the cheapest and easiest manner possible, making use of all they found on the site for the immediate purpose of second-hand building materials. In this way a most valuable piece of archæological investigation has perhaps been completely lost, and many indications of the arrangement of the most interesting of Christian churches probably disappeared on this occasion.



Fig. 13A.—Foundation Stones of Constantine's Basilica in the Russian church.

It would seem sufficiently evident that the rock levels around the east front of the basilica have been cut away subsequently to the building of the church, because the wall and rock have been cleaned down (after building) to the depth of about three inches at some height above the present floor in the Russian church (see fig. 13A). The wall has been prepared to receive marble slabs supported by dowels, the holes for which occur all over the face of the stones, and this marble decoration evidently finished at a platform level, marked by the horizontal line of the sinking, beneath which the rock has subsequently been cut away in a rough unfinished manner.

2. A still greater puzzle presents itself when we come to consider the traces of a colonnade which at some period occupied the usual position of such a feature in front of the east wall of the basilica.

The colonnade in question is represented by (*a*) the base of a terminal pilaster towards the south, which is now to be discovered in a miserable little eating-shop only 6 feet wide on one side of the "Suk-el-Amud"; (*b*) the base of an engaged column of grey granite (a much-decayed fragment) standing within the new Russian church, of which the actual base of the column may be white marble; and (*c*) the mysteriously uncouth attempt (apparently) at a copy of (*b*) in a base to another mutilated and decayed granite shaft, also standing within the Russian church.

These bases rest on a rock platform partly covered over with stone paving which prevents any investigation of their actual site.

In the building of the new Russian church these interesting fragments have been carefully incorporated *in situ*. At the same time it is a little difficult to realise their original appearance or to discover if they occupied the position of detached or attached columns. At present they



FIG. 14.—The southern base remaining within the Russian church



FIG. 15.—The northern base remaining within the Russian church.

are treated as if they belonged to the latter category, and they appear partly imbedded in the external wall of the modern church.

The base mouldings of the column and its pedestal within the Russian church are precisely the same as those on the base in the little shop outside, and the pilaster base in the shop has a plan of an extra set-back to the adjacent wall, which seems to suggest its terminating a series of attached columns.

The bases of the two columns (figs. 14 and 15) preserved within the Russian church are very remarkable. Like the pilaster in the shop outside, these columns rest on low pedestals—that on the south being moulded in an ordinary style of Byzantine work, and apparently partly concealed by later masonry and cement. It is much mutilated. The northern of the two appears to be a mere block of stone, of which the moulding has only been commenced. In this latter the base of the column and the pedestal form one block, in the other example the base of the column is distinct from the pedestal.

The question arises as to whether these two pedestals are cut in separate blocks of stone or are part of the rock platform on which they stand. As the platform was covered over with paving at the time of the building of the new Russian church, it is of course impossible now to see if the apparent blocks of stone are part of the living rock or not.

In the *P.E.Q.S.* for 1888 (p. 17) Herr Schick appears to give the first regular report or statement on the discovery of the remains on the Russian property. According to this the Russian Society bought the site between the years 1859 and 1862 (in two portions). A visit of the Grand Duke Serge was commemorated by a general clearance of the ground under the supervision of Herr Schick, and an official report published in Russian and in the German Palestine *Zeitschrift* 1885 (p. 245). A more complete clearance of the site was made in 1887, of which a plan was made by Herr Schick and communicated to the Palestine Exploration Fund. A continuation of this report appears on p. 57 of *P.E.Q.S.* for 1888. Herr Schick begins by referring to the granite columns in "Suk-el-Amud," which at the time were three in number, a fourth having been removed twenty years before, also the remains of a pier or stone jamb (the pilaster base within a shop). The space between the columns appears to have been closed with masonry, "apparently built by the Crusaders" (and covered with a vault).*

Sir C. W. Wilson, commenting on the above statement in the same paper, states that "It is so important that researches should be carried on at this spot, that the Committee have taken



FIG. 16.—Capitals found in the recent demolition of the Muristan.



FIG. 17.—Capitals found in the recent demolition of the Muristan.

steps, which they hope will be successful, to work in co-operation with the Russian Society." This hope seems not to have been fulfilled.

Herr Schick states that as far as he knew no plan except his own was made of the site before the building of the Russian and Greek property in 1887. (See *P.E.Q.S.*, 1888, p. 20.)

RESTORATION OF BUILDINGS BY THE PATRIARCH MODESTUS

The greatest difficulty presents itself in any attempt to bring the ancient wall (1) into any usual harmony of design with the colonnade (2) in front of it. The wall has all the appearance of being the original Roman work of the fourth century. The largeness of parts, the scale of the masonry, and the evidence of the dowel holes, which correspond with the statement of Eusebius about the marble on the external walls of the Martyrion, are all characteristic of the period. But the colonnade is on a very different scale and evidently belongs to the poor rebuilding of the seventh century by Modestus and St. John Eleemon. The two oldest representations of the basilica hitherto discovered—the apse mosaic of St. Pudenziana, Rome, and the rude attempt to show the buildings on the famous Madeba floor mosaic—clearly give the impression that the Martyrion was originally designed without any portico covering the great

* The columns of the eastern façade referred to by Schultz in 1845 are perhaps clearly described for the first time by Willis in 1849. See Williams' *Holy City*, vol. ii. p. 250.

eastern doors. This must have been added in the seventh century, and within a few years the Caliph Omar appropriated this new feature in the buildings for his mosque. (*Vide infra.*)

The existing base of a wall of great stones in which the three doorways of the basilica are traceable extends in a line from south to north from the corner within the new Russian church, for a distance of 100 feet, the northern portion being buried within the substructures of the Coptic convent. The central doorway (see fig. 12) was laid bare in the autumn of 1907, but it has since been covered up with modern additions so that it is difficult to appreciate its proportions. This central doorway is the only one of the three which has any architrave mouldings cut in the stone jambs (see fig. 12), and from this circumstance we must conclude that the wall has been in some manner rebuilt, and that the central door was re-erected or restored under the circumstances. As already remarked, the wall within the Russian church appears to be *in situ* covered with dowel holes, and has been pared down to receive marble slabs, and the doorway which occurs in this portion may have been furnished with a marble architrave, but in that case the central doorway must belong to the rebuilding of the seventh century, as it seems hardly probable that the builders would give it a mere stone architrave whilst the less important side entrances were decorated with marble. The fact that this central doorway has no apparent cill and is consequently at a lower level than the door in the Russian church harmonises with the idea of its belonging, together with the colonnade, to the seventh century. To the rebuilding of this century also belongs the lowering of the rock platform in front of the three doorways to almost the level of the Suk-el-Amud of modern days.

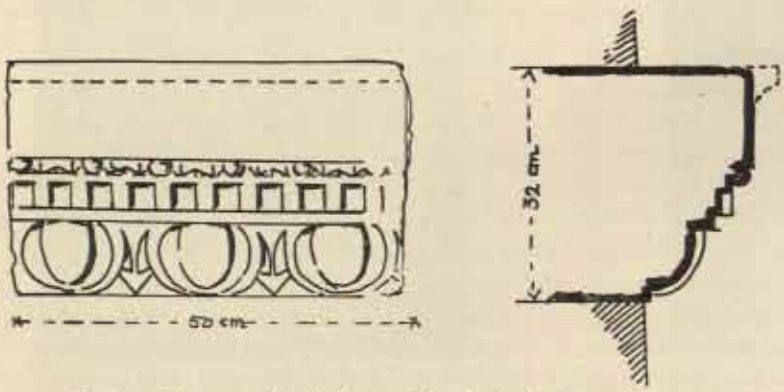


Fig. 18. Fragment of Cornice (stone) formerly *in situ* (?) at north end of Basilica Wall. Now destroyed.

If the above theory be correct, the fragment of wall within the Russian church may be considered to belong to the fourth century, and the central doorway with the colonnade to the period of rebuilding after the first destruction of the basilica by the Persians in 614.*

In 1894 the present writer observed a fragment of cornice with egg-and-dart ornament (fig. 18), evidently of the same date as the central doorway, which looked as if it was *in situ* on the top of the great stone courses within the Coptic convent. This fragment has been since destroyed. Its presence seemed difficult to explain, and it may have merely formed part of some accidental feature of which no other record now remains.

One of the most interesting discoveries connected with the monument was made in May 1897. One of the large stones in the basilica wall, at a height of about 15 feet, at a point a little to the south of the central door, which had become exposed during the repairs to the Coptic

* A series of nine much mutilated Corinthian capitals of a debased character, possibly of the seventh century, have recently been found during the demolition of the Muristan ruins, adjoining the Holy Sepulchre. They are of a plan combining a column attached to a square pier, suggesting a cornice with projections over the columns in the later Roman or Byzantine manner. These capitals, which have all the appearance of having formed part of such a façade as once existed at the east end of the Basilica, are now stored in the entrance to "Abraham's Convent." The capitals (Corinthian) are of an inferior workmanship, but of the usual design with small volutes. They measure 2 feet 10 inches in height by about the same in width, and would fit on to the usual columns of about 2 feet diameter. It should be noted that the average width of column fragments found in these ruins is about 2 feet (figs. 16, 17).

convents, was found to be inscribed with a large panel of elegant Cufic. The inscription runs in the formula: "In the name of God, Merciful and Compassionate. From the Exalted Majesty. It is commanded that this mosque is to be guarded, and that none of those under our protection (*i.e.* Jews and Christians) be permitted to enter it, either by payment or under any other pretext, &c., &c." * The name of the Caliph, and the date, are unfortunately omitted, but it is doubtless of the period of Omar and Sophronius. This most interesting memorial of the foundation of the first Moslem mosque in Jerusalem was immediately, on being found, sent to Constantinople, where by this time it is probably lost; a photograph of the stone appears in *P.E.Q.S.* for 1898 (p. 86). In this inscription we have an additional identification of the seventh-century colonnade of the east front in which the mosque was established by the Caliph in 637. Here it may be permissible to suggest that the very rudely executed column base, the northern of the two within the Russian church, may belong to some alteration or subsequent rebuilding of this portion of the colonnade when in use as a mosque. According to Arculphus the early Moslem settlers in Jerusalem were content with very poor makeshift buildings for their mosques, the great mosque of the Haram being a mere adaptation of the ruined temple of Jupiter.

MEDIÆVAL CHRISTIAN.

BYZANTINE REBUILDINGS.

Remains of the earlier Byzantine period in the history of the Holy Sepulchre Church, excepting those above described, are comparatively difficult to trace. On the south side of the parvis of the Crusaders' building are the evidences of an arcaded construction, uncertain both in design and in date, which, to judge by the remaining wall-respond which still stands at its western extremity, may also be of the period of Modestus. This wall-respond or wall-shaft (about 2 feet in diameter) has the curious basket-shaped capital so characteristic of early Constantinople work. Several bases of columns belonging to this arcade may be traced along the south side of the parvis or piazza, but it is difficult to imagine what purpose such an arrangement served unless it reproduced to some extent the colonnades surrounding Golgotha described by Eusebius and the earlier pilgrims. A similar arcade on the north side of the church, occupying a position close against the front of the north transept, seems to represent the corresponding cloister on the opposite side of the buildings. The basket-shaped capital above referred to has a very early character; but still both these arcades may very possibly be no older than the much later rebuildings after the great destruction by El Hakim in 1008, and the northern arcade has evidently been completely rebuilt long subsequently even to the latter period.

The Church of St. Mary the Latin was a building of the Byzantine and Romanesque period, within the limits of the southern arcade above described. Its position was clearly defined for the first time by the present writer in 1895. De Vogüé had a general idea on the subject which was correct, but he seems to have missed seeing the still well-preserved apse of this ancient church which is visible enough to anyone passing through the parvis; and indeed its large wide arch resting on capitals built up in the flat wall on the east side of the little piazza is almost intrusive on the sight. This apse is now used as a Holy Site by the Armenians. The church to which the apse belonged is completely swept away, but the pathway down to it shown on the plan of Arculphus is still preserved in the long straight staircase within the modern Greek convent on the western side of the parvis (*vide* plan No. 21).

Of this earlier period a much mutilated fragment probably survives in the new Russian church in the form of an archway about 15 feet high. It has, however, been very much altered

* Cufic Inscription: found May 1897, in a stone about 1 metre 10 cent. square *in situ*, at the side of the roadway leading to the Coptic convent. *P.E.Q.S.*, 1897, p. 302.

See also M. C. Ganneau's remarks on above in *P.E.Q.S.*, 1901, p. 246.

See also *P.E.Q.S.*, 1898, p. 86, for photo of stone, by Dr Van Berchem.

and rebuilt at different times, so much so that its present position and condition hardly afford even a subject for speculation. Where the present new Russian hospice and Greek shops stand was formerly a bazaar which may have perpetuated the existence of a mediæval market—perhaps the "Malcuisinat" of Crusading times where the pilgrims found their miserable cookshops and restaurants of the period. The Byzantine-looking archway now within the Russian premises may have been built in connection with this market.

The later Byzantine buildings are again somewhat problematical. The well-known description of the rotunda by Sæwulf the Englishman, with its side chapels extending southwards in such a way that "all the churches were visible to a man standing in any one of them," would lead us to suppose that the line of three chapels known at the present as those of St. John the Divine, the Trinity, and St. James is identical with what Sæwulf saw. These three chapels with the chapel of St. Mary (now called "of the Apparition") on the opposite side of the church may probably occupy the exact sites of a more ancient date, but such architectural features as they possess give an impression of a much later style than the pure Byzantine. The chapel of the Trinity had at one time a dome, no longer in existence, the pendentives of which remain with some traces of mediæval painting on them.

BUILDINGS OF THE LATIN CRUSADERS

During the early and middle ages the desire on the part of Western Christians to visit the Tomb of Christ was to some extent satisfied by the erection of copies of the entire buildings of the Holy Sepulchre in Jerusalem.

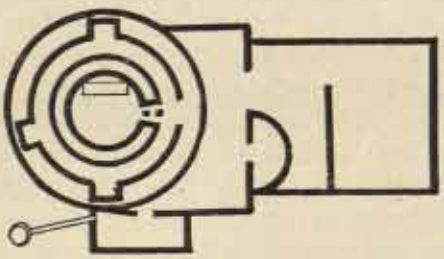


Fig. 19.—Bib. Imp. Mss. Lat. 2321. Tenth century Manuscript.

The largest and most ancient, and at the same time most complete, of these *replicas* is the group of buildings known as the Seven Churches of San Stefano, Bologna. These buildings (unfortunately "restored" in the nineteenth century) are of yellow brick with stone details in the local style of Romanesque art, and inserted in the walls are numerous carved fragments from some ancient temple, once occupying the same site. The interesting buildings have all the appearances of a remote antiquity, and certainly represent the plan and conditions of the Holy Sepulchre in Jerusalem during the period intervening between the restoration by Modestus and their destruction by Hakim. Here we see (fig. 20) the Holy Sepulchre without the outer chamber, as described in its earliest form; the circular church opens into the central atrium or courtyard with an arcade on either side, north and south; and at the east end of the group of buildings is a large church representing the Basilica with five aisles. The large open enclosed space on the south is still known as Calvary, and the small chamber or chapel on the north side is the "Prison."

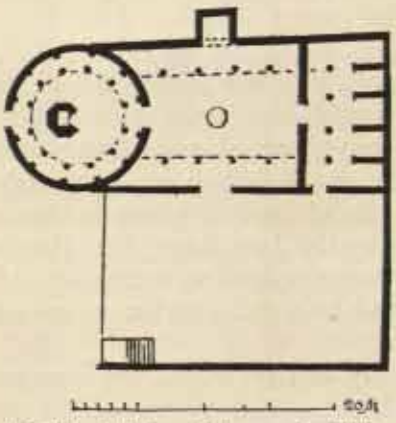


Fig. 20.—S. Stefano, Bologna. Probably seventh century.

With its legends of remote foundation by Petronius, Bishop of Bologna, and a descendant of the Emperor Constantine; its votive offerings from the Lombard King Liutprand; its more or less successful attempts to reproduce the "stations" of Jerusalem, this singular group of churches, in spite of modern "restoration," is one of the most interesting antiquities of Italy.

Elsewhere in Europe traces of similar attempts to reproduce the Holy Sepulchre, but generally of a much later date, are to be found. Several examples existed at one time in France, but at the present day they are in a very imperfect condition; Saint-Sepulchre de Neuvy and Saint Benoit la Rivière seem the best preserved. In Spain the copy standing in the suburb of Segovia is of great interest, as it appears to preserve the arrangements of pre-crusading times, with the mere apse on the east side of the Rotunda, which was afterwards removed to give place to the "Chorus Dominorum."

The altar above the Tomb.—Both at Bologna and at Segovia the flat space or platform formed by the roof of the Tomb is occupied by an altar. The space is about sufficient to accommodate the half-dozen clergy engaged in celebrating High Mass, but not more than sufficient. At Bologna this limited space is protected by a balustrade, at Segovia it becomes more of an inner chapel formed by the inside walls of the church. This arrangement agrees with the description by the Russian Abbot Daniel who refers to the altar above the Sepulchre at which the priests celebrated Mass on the Easter-day of his visit.

All these mediæval reproductions of the buildings at Jerusalem would be made with the aid of such plans as were inserted in the manuscript travels of the period—as, for instance, Fig. 19. It is not therefore surprising if they betray slight acquaintance with the actual structures they profess to represent.



PORTE STE. MARIE IN 1860.
From a photograph lent by the Palestine Exploration Fund.

[To be continued.]

REVIEWS.

ROMANESQUE AND ORIENTAL ARCHITECTURE.

A History of Architecture, having special regard to the Natural Artistic Results of Construction and those Methods of Design which are the Result of Abstract Thinking and of the Pure Sense of Form. By Russell Sturgis, A.M., Ph.D., Fellow of the American Institute of Architects, &c. Vol. II. Romanesque and Oriental. 398 Illustrations. New York and London. 1910. Price 25s. [B. T. Batsford, 94 High Holborn.]

In the second volume of his *History of Architecture* Mr. Russell Sturgis has dealt generally speaking with the buildings of Europe, Asia, and Northern Africa between the third and twelfth centuries of our era; he has dealt, that is to say, with the Romanesque and Byzantine periods, including the earliest Christian buildings; with Moslem buildings generally in Syria, Egypt, Spain, Peru, India, and Sicily; and he has included also a general survey of building in India, China, and Japan.

In his preface to this volume Mr. Sturgis repudiates a suggestion made by some critics of the first volume that there is need of more profound inquiry as to ultimate causes: Why, for instance, were the Egyptian buildings just what they were? Such an inquiry, he holds, would lead us away from the real subject of his work into the region of metaphysics or of ethnics—"let us keep close to that which can be verified." I have referred to this passage partly because it points to the principal distinction between Mr. Sturgis' attitude of mind and that of earlier writers such as Lübke who sought for no such limits, and partly because it points to what I think is the most characteristic, and at the same time the most valuable, quality of Mr. Sturgis' work. Mr. Sturgis approaches his subject as a practical architect familiar with, and interested in, different kinds of materials and their application to different kinds of buildings, and the chief interest of his work lies, I think, in the connection which he seeks to trace in all cases between the problem of the material on the one hand and the resultant peculiarities of style on the other.

Why did the Egyptians batter their walls? Because the material which they first used was sun-dried mud bricks which would not hold together in large masses unless the walls were sloped inward from bottom to top. Why did the Chinese curve their roofs? Not for any such fanciful reason as their memory of the sagging canvas of the tents which sheltered them in the earlier period of their history, but because their ignorance of scientific carpentry led them to strengthen their outer walls by the addition of outside galleries or verandahs in order to resist the thrust of the roof, and this gave an occasion which they were not slow to welcome of changing the pitch of the rafters. Why did the Syrian builders of the fourth century carry their arcaded walls across their basilicas from north to south instead of longitudinally from east to west as we do in Europe? Because they could not get timber beams long enough to span the nave; but they could get stone slabs large enough to rest on cross walls not more than eight feet apart.

No general historian of architecture has, I think, dealt so thoroughly with the constructional aspect of the subject, and this gives its principal and peculiar interest to Mr. Sturgis' book. His treatment of other problems is not always so thorough. Allusion is made, for instance, to the rather difficult question of the orientation of Early Christian churches; but Mr. Sturgis is content to leave it without any more definite conclusion than that some churches were built with the sanctuary at the west end and some with the sanctuary at the east end.

The number of problems with which a modern historian of architecture is brought face to face is so great, the mass of literature which has come into being in recent years and which he has to master is so enormous, and the buildings which modern railways and steamships have brought within his reach are so innumerable that it would be ungrateful to look too closely into points of detail; nor indeed will it often happen that any one reader is able from personal knowledge to follow Mr. Sturgis in his detailed description of buildings in three continents of the world. The chapter on "Later Romanesque Building in England," however (Book lx., chap. iii.), contains several statements which, interesting as they are, would be much more so if they were fully established, and this would have involved, I think, some inquiries which would have added considerably to the bulk as well as to the interest of the book. There is one paragraph (p. 382) in this chapter which is apt to be misleading: "The church of St. Mary the Virgin in Oxford was more often considered as the Chapel of Christ Church College than as a Cathedral." Christ Church of course is not, strictly speaking, a college, and while the dedication of the Cathedral church is indeed to St. Mary (and All Saints), the church commonly known as St. Mary the Virgin is the church of that parish in High Street.

From a literary point of view there is considerable variation of quality in different parts of the volume, and there are parts which it is difficult to think that Mr. Sturgis would not have revised and rewritten if his life had been prolonged. While, however, there are among the judgments and opinions expressed in this volume many which are not entirely convincing and which seem to require more support, all students of architecture must be very grateful to the author for the great ability, knowledge, and labour which have contributed to its production. Since Fergusson published his great work in 1865, the science of archæology has seen very remarkable development and the mass of knowledge at the disposal of the historian of architecture has enormously increased. Mr. Sturgis has done a great deal to bring the

general view of the subject up to date, and his book is likely to be used for years to come as one of the principal, if not the principal, textbooks on this subject.

The illustrations of the volume are very full and very good. The greater number are reproduced from photographs, many are taken from other works, and a few—and these are not the least interesting—are from drawings and diagrams by the author. ARTHUR S. DIXON [*F.*].

GUILD OF MAGISTRI COMACINI.

The Comacines: their Predecessors and their Successors. By W. Ravenscroft, F.S.A. [F.]. [London: Elliot Stock. 1910. Price 3s. 6d. net. Preface, 75 pages, and index.]

Pleasantly written, this interesting book, with twenty-four illustrations, is the outcome of a lecture and some Papers by the author after a couple of visits to Italy. Little of the history of the Comacines is known with exactitude, but Mr. Ravenscroft's contribution condenses all that he succeeded in gathering by patient investigation, and the conclusions arrived at he naturally hopes will appeal in one way or another to antiquaries, architects, and members of the masonic fraternity. The outline sketch leads into the realms of conjecture, and there is much to ponder upon concerning the possible antecedents of the Comacines, and perhaps also of their successors. Reasons are here set out for supposing the Guild of Artificers who held as their centre the island of Comacina in the sixth century and afterwards, and who were linked with the colleges of classical Rome, were, as to their traditions, descended from the Hittites. Thus we may be led to believe they were inheritors of traditions of King Solomon and of the Temple; and the author points out directions where, he submits, manifestations of the influence are discernible. He holds that the great guild of the Comacines was merged into the great masonic guilds of the Middle Ages, and that as these guilds died out their forms and ceremonies were preserved to a great extent in our masonic lodges. "Is it a wild inference," he asks, "that, by traditions, the Comacines were, at any rate in some senses, the successors of the Temple-builders, and that the masonic stories associated with the Temple told to-day in connection with Freemasonry are not without foundation?"

In our own country it is unquestionable that early in the seventeenth century a certain class of skilled workers in stone began to admit other members, antiquarians and persons of social standing, who were taught signs and passwords, most likely identically some of those in use by the workers when they travelled from place to place as a means of recognition and evidence of skill. Though the term Freemason is often used in the sixteenth to eighteenth centuries, implying a superior grade of mason, there are well-known references dating from 1646 to 1709, successively of Ashmole, Plot, Holme, Aubrey and Steele, to the new class of "Accepted" or Speculative Freemasons. Here, where we are on sure ground, and where Mr. Ravenscroft could be convincing enough, he merely quotes the Aubrey MS. Nevertheless, a certain class of operative masons of the late sixteenth or early seventeenth century, from whom the great masonic body of to-day trace descent, were, Mr. Ravenscroft claims, the legitimate descendants of the great Comacine guild.



The author deals with the particular surface ornamentation in interlaced patterns so frequently carved on stone in buildings of various early periods—the endless, or King Solomon's, knot; and also the mysterious sculptured lions at Pisa and Siena, with others of far earlier date. When we bear in mind, as Mr. Ravenscroft tells us, that

of the great distinguishing badges of the Comacini, the endless knot and the Lion of Judah, the former "is everywhere the badge of the same brotherhood—the sign manual of the same guild of craftsmen," we cannot but be impressed with his very interesting suggestions. One chapter is devoted to Comacine influence in the British Isles.

As this notice is sent to press we learn that Dr. Garstang's recently published book, *The Land of the Hittites*, focuses all the knowledge that has been gathered of this mighty race of Asia Minor between 2000 B.C. and 700 B.C.; and Professor Sayce, in the introduction, expresses his opinion that on the intellectual side its culture, which spread both eastward and westward, promises, as



FRESCOES IN LOWER CHURCH, S. CLEMENTE, ROME.

knowledge extends, to enlighten us upon "much that is mysterious in the art and religion of Greece and Europe."

Mr. Ravenscroft's little book appeals to a wide circle; it is well that architects should be acquainted with it, and I hope it will be appreciated. We live in the hope of discoveries: seeking to illustrate rather than to prove; it would be a thousand pities were the author to stop short with his little volume and neglect to put before us a further work in elucidation, tracing much that is traditional in art to the sources from which it might be supposed to be far removed.

Already there is an announcement of a new book dealing with the district of Comacine settlement, entitled *The Lake of Como: Its History, Art and Archæology*, by the Rev. T. W. M. Lund.

HARRY SIRR [*F.*].

THE LATE MR. T. J. BAILEY [*F.*].

By the death of Mr. T. J. Bailey [*F.*], which occurred in June last, we have lost a member whose influence on the evolution of school planning during the last twenty-five years can hardly be exaggerated.

Thomas Jerram Bailey was born in 1844. He was articled to the late Mr. R. J. Withers, and afterwards became assistant to the late Mr. Ewan Christian. In 1872 he entered the offices of the London School Board. He became an Associate of the Institute in 1881 and a Fellow in 1893. Succeeding Mr. E. R. Robson as Architect to the London School Board in 1884, when this body ceased to exist, in 1904, he was appointed Architect to the Education Department of the London County Council. Since 1884 Mr. Bailey had designed the whole of the London Board Schools, Higher Grade Schools, those for special instruction, schools for the deaf, dumb, and mentally and physically defective, pupil teachers' centres, laundry, cooking, manual training, art and science centres, &c.

He was an indefatigable worker, as is evidenced by the enormous number of works carried out from his designs and under his supervision. In June 1899 he read a Paper before the Institute on "The Planning and Construction of Board Schools," which was full of interest, and showed how fully he had studied and mastered every detail of the subject. It is interesting to note that Mr. Bailey advocated in this Paper the Plenum System of ventilation for schools, a system at that time in the somewhat experimental stage. The late Mr. Mountford, who took part in the discussion, said he "should like to hear his (Mr. Bailey's) opinion of the system ten years hence." That time has now expired, and certainly facts appear to justify Mr. Bailey's foresight. There is probably no type of modern building which more nearly combines the merits of carefully thought-out planning, with an architectural treatment so thoroughly expressive of its purpose, as a typical London Board School.

The duties of an official holding such an appointment as that held by Mr. Bailey are by no means easy. Mr. Bailey's criticisms of a plan, even when necessarily adverse, were those of one who knew his subject so thoroughly that they were unhesitatingly given, never unkindly, and almost invariably followed by most valuable advice.

Two years ago Mr. Bailey reached the age for retirement, although his services were retained for a further period in order to allow him to act as Advisory Architect for work he then had in hand, and also to finish a report on the whole of the non-provided schools in London. This latter report was completed just before his death, which took place scarcely six months after his retirement.

To those who knew him, either personally or professionally, the pleasant memory of our late colleague will live for many years.

R. STEPHEN AYLING [*F.*].



9 Conduit Street, London, W., *24th September* 1910.

CHRONICLE.

The Institute's Address to King George on his Accession.

The subjoined communication, addressed to the Secretary of the Institute, has been received from the Home Secretary in acknowledgment of the Address submitted to the King on behalf of the Institute on the occasion of His Majesty's Accession. The text of the Address will be found in the Journal for the 28th May, p. 580. The work which has received such gratifying commendation was carried out by Mr. Graily Hewitt.

Home Office, Whitehall: 31*st August* 1910.

Sir,—I am commanded by the King to convey to you hereby the thanks of His Majesty and of the Queen for the loyal and dutiful Address of the President, Council, and Members of the Royal Institute of British Architects expressing sympathy with their Majesties on the occasion of the lamented death of His late Majesty King Edward the Seventh, and congratulation on His Majesty's Accession to the Throne.

His Majesty has expressed pleasure at the artistic beauty of the Institute's Address.—I am, Sir, your obedient Servant,

Winston S. Churchill.

The R.I.B.A. Galleries, 9 Conduit Street.

The Resolution passed at the Special General Meeting of the 9th June last, and confirmed at the subsequent Special General Meeting of the 20th June—viz. "that the Council be empowered to purchase all the shares in the Architectural Union Company not now in the possession of the Royal Institute"—has been carried into effect. The shares have been purchased, and the whole of the shares in the Company are now vested in the Institute. Under the contract with Messrs. Knight, Frank, & Rutley, the details of which were discussed and agreed to at the Special General Meeting of the 23rd June 1909, and confirmed at the Special General Meeting of the following 21st July, the Institute entered into possession of the Galleries in the rear of No. 9 Conduit Street on the 24th June last, and for the past three months the rooms have been in the hands of the builders, working for the most part extra time in order to get the premises in readiness for their new uses before the opening of the Town Planning Conference on the 10th of next month.

The new premises consist of three large Galleries with a separate entrance from Maddox Street, together with three small offices adjoining. These had previously been used for the purposes of an auctioneer's business, and had little pretension to architectural treatment, besides being in a very bad condition of decorative repair.

The uses to which the Council purpose putting these rooms are as follows:—

1. The holding of periodical exhibitions of Prize and other drawings.
2. The conduct of the Institute Examinations.
3. The General Meetings of the Institute, Conversaziones, and other social purposes.

These arrangements will enable the Library to be maintained solely for library purposes, and will allow of much needed extension in book accommodation.

The works required to adapt the new premises to these uses have been more extensive than was originally contemplated. Not only has it been necessary to provide for the decorative treatment of the Galleries, but many structural repairs and reconstructions have been found requisite. The drainage system of the entire building was found to be in a very defective condition, and the whole has been reconstructed on the soundest modern principles with iron pipes throughout. Small alterations to the electric services in the Library, &c., revealed the fact that the wiring of the whole premises, which was executed in the early days of electric lighting, was in a dangerous condition, and it has been found necessary to re-wire the entire building in screwed steel tubing.

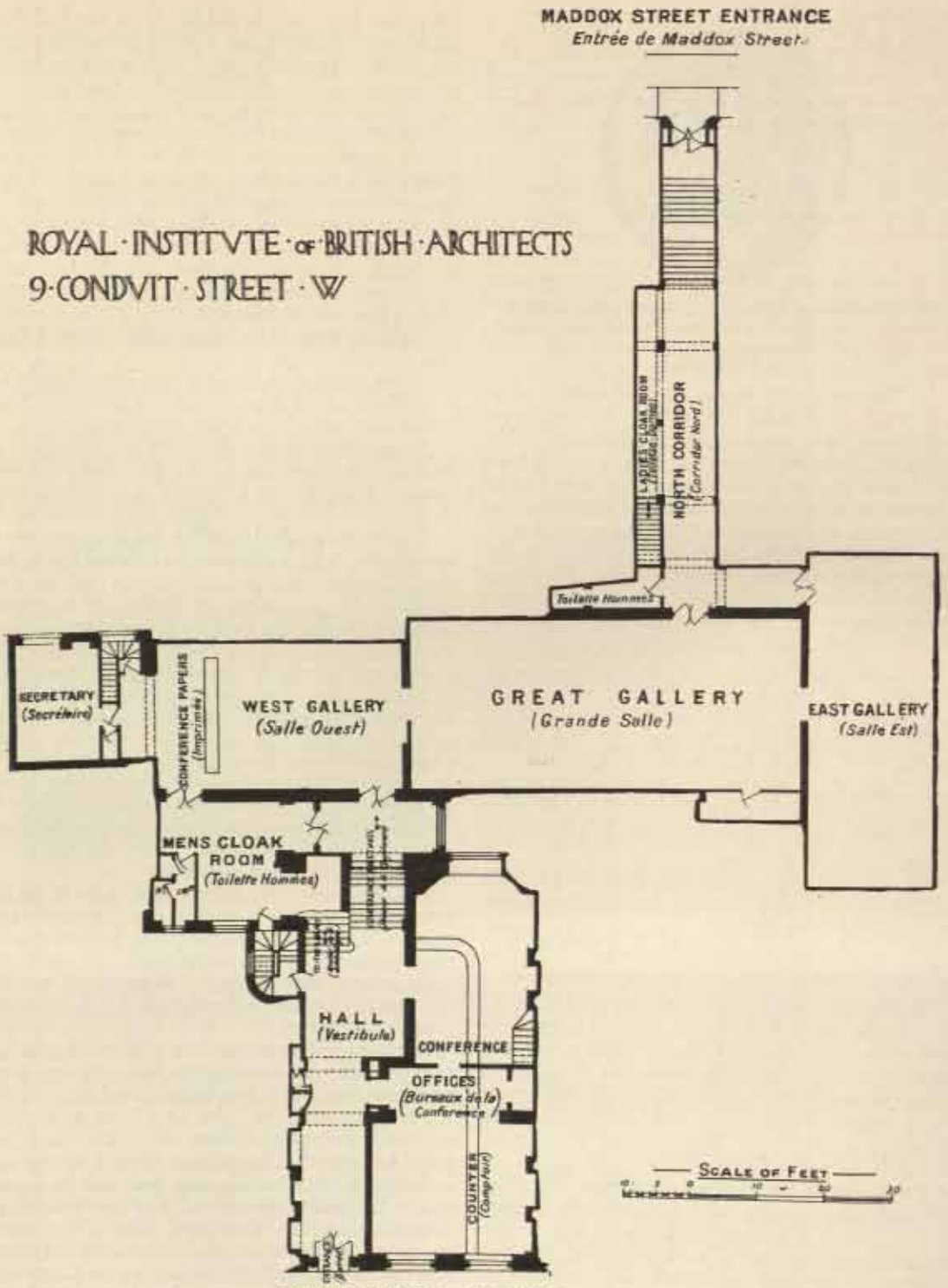
The old wooden skylights, which were in an unsatisfactory condition and a constant source of expense, have been removed, and patent glazing with lead-covered bars substituted.

An entirely new system of heating and ventilation has also been introduced, which it is hoped will prove satisfactory.

The main entrance hall from Conduit Street has been remodelled and repaved, the lighting much improved, and the whole redecorated.

The three main Galleries have been entirely remodelled, with new ceilings, floors, &c. It is proposed to equip and furnish one of the Galleries as a social room for members, and here will be permanently hung the fine collection of portraits in the possession of the Institute. The Galleries—to be known as the Great Gallery, the East Gallery, and the West Gallery—are shown on the accompanying plan, which is reproduced from the Handbook prepared for the Town Planning Conference.

The Committee of Council responsible for the disposition of the new premises consisted of the



GROUND FLOOR PLAN

(Plan du rez de chaussee)

President (Mr. Leonard Stokes), Mr. Ernest George, A.R.A., Mr. Henry T. Hare, Mr. Reginald Blomfield, A.R.A., and Mr. Edwin L. Lutyens. The work has been very expeditiously and efficiently carried out by Messrs. Holloway Bros., from the designs and under the personal supervision of the Hon. Secretary of the Institute, Mr. Henry T. Hare.

R.I.B.A. TOWN PLANNING CONFERENCE, LONDON, 10–15 OCTOBER.

The Conference and Municipal and District Councils.

The following circular letter addressed from the Institute by the Secretary-General of the Conference has been printed in the press this week throughout the United Kingdom:—

SIR,—Much of the actual work of preparing the Town-Planning Schemes provided for under the new Act will fall within the scope, not of the great Corporations, but of the Borough and Urban District Councils. It is, therefore, of the first importance that these authorities should avail themselves of the singular advantages offered by the Conference, which will be held in London from 10–15 October, for the study, not only of the history of the subject, but also of the examples which will be presented of the architectural methods adopted in other countries as well as in our own.

The Local Government Board will, I am informed, be prepared to sanction such reasonable expenditure out of the rates subject to Government audit, as may be entailed by the attendance of representatives at this Conference, provided that not more than three members of an authority attend officially, one of whom should be the architect or surveyor.

The Royal Institute of British Architects has not hesitated to incur very heavy expenditure in the fulfilment of what it considers to be a public duty, by organising the Conference and bringing together the great collection of drawings and models which will be exhibited at the Royal Academy. It must necessarily be very long before the circumstances can recur which have rendered it possible to make the present arrangements, and the Royal Institute asks that all those who are responsible for the administration of the Town Planning Act of 1909 will support it in the effort which it is making for the public good and send their application for membership of the Conference to me without delay.—I am, Sir, yours truly,

JOHN W. SIMPSON, *Secretary-General.*

The Conference and the International Town Planning Exhibition.

The Exhibition, which is to be so important an event in connection with the R.I.B.A. Town Planning Conference, will include upwards of 1,000 plans and many models illustrating the growth of cities ancient and modern; types of town planning; the development of suburbs, garden cities, and villages; the architectural treatment of streets and *places*; and the laying-out of parks, open spaces, and playing fields. The Royal Academy has generously placed its Galleries at the disposal of the Institute for the purpose of the Exhibition, which will remain open after the close of the Conference until the 22nd October.

The greater number of the chief exhibits shown at the Town Planning Exhibition held in Berlin in June last, and attended by over 65,000 persons, are being sent over for this Exhibition. In addition to these a large number of new exhibits from England, the Colonies, America, France, and other countries will be included in the Exhibition, which will be one of the most comprehensive exhibitions dealing with the subject of town planning and city development ever held, and will effectively illustrate, by examples taken from all parts of the world and many periods, the whole development of town planning from the earliest times.

The Prefect of the Seine has sent a most valuable series of plans, both ancient and modern, illustrating the development of the city of Paris, showing the great town-planning works carried out at different periods, including those under the supervision of Baron Haussmann, and also showing the works now contemplated to complete the schemes prepared by Haussmann and to carry out other necessary improvements, the whole forming part of a great scheme for the improvement of the city of Paris, for which the City Council have sanctioned a total expenditure approaching 36 millions sterling.

Nancy, Havre, and other French towns will be represented by exhibits, and plans will be shown of the great parks—Versailles, St. Germain, &c.—so characteristic of eighteenth-century France.

Germany, as the leading nation in modern town-planning work, will be exceptionally well represented. The premiated designs in the great competition recently held for the planning of Greater Berlin are of unique interest, especially to all those connected with London and our greater cities, as these schemes deal comprehensively with the central traffic problems connected with the development of a great city, as well as the development of the external area.

The cities of Munich, Cologne, Düsseldorf, Nuremberg, and many other growing industrial towns are sending plans, sketches, and models illustrating the way in which they are dealing with the rapid extension of their urban districts, and with the difficult housing problems accompanying such growth. The industrial town of Essen, the seat of the famous Krupp Works, one of the largest industrial undertakings in the world, has made exceptional efforts to house its population in a healthy manner and to break away from the block system characteristic of so much German housing. It is hoped that Messrs. Krupps will also exhibit models of some of their industrial colonies.

The city of Ulm, which is famous in Germany for its traditional adherence to the cottage type of dwelling, owing to the far-sighted policy of Oberbürgermeister Wagner in purchasing and dealing with sufficient area of land to control the character of the city's development, is sending a very full exhibit illustrating its methods of work. The city of Frankfurt will show its methods of dealing with the opening out of old, congested areas, and of executing town-planning schemes by means of rearranging the boundaries of ownership, which in many German districts are a great difficulty owing to the minute sub-division of land.

From Sweden and other Scandinavian countries there will be a most interesting exhibit of plans and models illustrating how the growing towns, by purchasing land, by building houses and facilitating building of houses by various associations, are enabled, in conjunction with successful town planning, to regulate wisely their development and put a check on excessive land speculation.

The city of Rome has sent valuable plans illustrating the development of that most interesting of all cities at different periods, and also showing the present proposals for improving the city. The city of Milan sends an example of an Italian garden city and other interesting exhibits.

America's work will also be well represented. From Chicago has come the great series of beautiful drawings made by Mr. Burnham for the improvement and development of that thriving commercial centre. These drawings are of unique interest, and display not only most beautiful draughtsmanship, but one of the most comprehensive schemes for dealing in an entirely modern way with the development of a great city, its harbours, its railways, its parks, and its buildings. Other American civic and educational centres will be illustrated, as well as the system of parks and parkways which are becoming such an important feature in modern city development across the water.

Among other exhibits which may be mentioned are interesting plans and views of Khartoum, Omdurman, Kingston (Jamaica), and other colonial towns. It is expected to give particulars of the site of the new Australian Commonwealth capital.

From nearer home, Edinburgh sends a valuable collection of original drawings illustrating one of the few examples of comprehensive town planning that we have in Great Britain; while Professor Geddes is arranging a special series of drawings and models illustrating the development of Edinburgh and the method of conducting the city survey, so important a preliminary stage to all town-planning work.

The modern garden city and suburb development will be fully illustrated by some beautiful models illustrating Continental examples, and both models and drawings fully illustrating the English garden city at Letchworth, the garden suburbs of Hampstead, Ealing, Harborne, Bournville, Port Sunlight, and others, while the Co-partnership Tenants' garden suburbs and villages will be well represented.

In addition to these drawings many interesting examples of maps and diagrams arranged to illustrate graphically the vital statistics of population, health, traffic, and other matters essential to a proper understanding of the problem of city development will be shown; and last, but by no means least in importance, the architectural aspect of the whole problem of town planning and city building will be fully dealt with, and some interesting examples will be shown illustrating various methods adopted by Continental cities to encourage good architecture and restrain the building of bad examples.

The fine collections brought together by Dr. Hegemann for the Berlin and Düsseldorf Exhibitions have made it possible at this time to gather together such a comprehensive Exhibition as will afford a unique opportunity for studying and comparing the best town-planning work that has been carried out in the past or is being now done. The Council of the Royal Institute hopes that all who are interested in the subject will take advantage of the opportunity thus afforded.

Election of Licentiates R.I.B.A.

At the Council Meeting of the 19th inst., the following candidates, having been found eligible and qualified under the Charter and By-laws, were elected Licentiates of the Institute in accordance with the provisions of By-law 12:—

ADAMS: William Henry.
ARMSTRONG: Charles Montegue Cecil (Warwick).
ARNOTT: James Alexander (Edinburgh).
ASHWELL: Francis George.
ATKINSON: Frederick John (Manchester).
AYLES: Herbert Weston (Cambridge).
BARROWCLIFF: George Harry (Loughborough).
BIGGS: Thomas Woodbridge.
BLOORE: George (Stoke-on-Trent).
BLYTHE: Samuel Osborne (Northumberland).
BROWN: Herbert Harold (Manchester).
BURROWS: John William (Birstall).
BURTON: Henry William.
CANTELL: Mark Taylor (Brighton).
CAVE: Aylwin Osborn (Letchworth).
CAWTE: Hugh James (Dover).
CHEETHAM: Harry (Manchester).
COULSON: John Thomas.
COYNE: Harold Gerald.
CRAGG: John Archibald (Aylesbury).
CRAIG: George Alexander (Market Drayton).
CRAN: John, jun. (Cape Town).
CROFTS: William Hastings (Hull).
DANBY: Harold Henry (High Wycombe).
DANE: Henry Ernest.
DAVIDSON: William Campbell (Aberdeen).
DAWSON: John Henry (Liverpool).
DENING: Charles Frederick William (Bristol).
DOUGLAS: Joseph Edward (Isle of Man).
DOWIE: Leslie.

DUNN : Edwin Thomas.
EDWARDS : George (Derby).
FAIRBROTHER : Tom Wilson (Blackburn).
FRY : Reginald Cuthbert.
FULLERTON : Walter.
GALT : John (Glasgow).
GASK : John Harold (Bolton).
GASKELL : Peter (Hull).
GODDARD : Rainald William Knightley.
GORMAN : Joseph Brown= Dick (Montreal, Canada).
HAMILTON : George Douglas.
HATCH : Francis.
HAWKES : Thomas Frank.
HIGGS : James Hardwick (Leicester).
HILL : Howard (South Shields).
HORSFALL : Walter Edward (Halifax).
HORTH : Frederick John (Hull).
HUNTER : James Douglas.
JOHNSON : Ernest Nalson.
LAVERICK : Frederick Russell.
LAW : Charles Orlando.
LEESON : Everard William (Manchester).
LOVEGROVE : Gilbert Henry.
MADDOCK : George (Halifax).
MANN : Charles (Dundee).
MARKS : Percy Leman.
MASTERS : William Arthur Harvey (Swindon, Wilts).
MERCER : John (Bombay).
MONRO : William Ernest.
MORRIS : James (Cape Town).
OLDACRE : Rae Samuel (Birmingham).
PEARSON : Charles Bulman (Lancaster).
PEARSON : Lionel Godfrey.
PERCIVAL : Joseph Ashton (Ashton-under-Lyne).
POMEROY : Ernest James (Bolton).
PORTEOUS : James Howard (Bolton).
PRANGNELL : John Cecil (Winchester).
RICHMOND : Ernest Tatham (Egypt).
RUSSELL : Thomas Herbert, M.A. Cantab.
SAVILLE : Albert Powis.
SEALE : Frank (Leicester).
SHEPHERDSON : Joseph (Bridlington).
SHEPPERD : Philip Henry Stone (Preston).
SMITH : John Woodfield (Manchester).
SNAILUM : Walter Wadman (Trowbridge, Wilts).
SOUTHALL : William (Retford, Notts).
TAYLOR : Thomas Lumsden (Glasgow).
THEAKSTON : Ernest George.
THOMAS : Ernest Montague (Simla, India).
TOUGH : Edward (Dundee).
TYLOR : Henry Bedford (Worcester).
WAKEFIELD : Benjamin Frederick George (Bristol).
WAKEMAN : Harry William.
WALKER : Percy (Manchester).
WEALD : George.
WHITAKER : John Russell (Leeds).
WHITE : William Dymoke (King's Lynn).
WILKINSON : Stephen (Calcutta).
WILLCOX : William Percival Mountford.
WILSON : Thomas Millwood.
WOOD : Arthur Stewart.
WRIGHTSON : William Henry.
YOUNG : Collings Beatson.
YOUNG : Thomas James.

Architectural Copyright.

A recent judgment in the Brussels Courts upholds the right of the architect to prohibit the reproduction of his designs without his consent having been obtained. The Paris correspondent of the *Daily Graphic* relates the circumstances as follows :—M. Acker, the architect of the Brussels Exhibition, having observed that a rival had erected two houses in the Avenue Albert, the façades of which were a reproduction of a façade he had designed for a building in the Avenue Louise, brought an action against his rival and claimed damages. M. Acker won his case, the tribunal basing its decision on the fact that the façades designed by the defendant were, from the level of the street to the second floor, a servile copy of the design of which M. Acker was the author, and that the slight differences in detail were only intended to disguise the counterfeit. In consequence, the imitative architect was condemned to pay to M. Acker an indemnity of £80, and the plaintiff was authorised to publish the judgment in three newspapers selected by him at the expense of the defendant.

Country Life of the 10th inst. published the following letter, addressed to its Editor, from Mr. John W. Simpson [*F.*], who, with Mr. John Belcher, R.A. [*F.*], represented the Institute and gave evidence upon the question of architectural copyright before a Special Committee of the House of Commons in May last year.* Mr. Simpson writes :—

"Thou shalt not steal" has been so long recognised as one of the necessary basic laws of civilised society that Mr. Voysey's apology for the thief in art, as for one who helps to "scatter beauty broadcast," suggests the whimsical inconsequence of Gilbertian opera. The music pirate, the forger of bronzes and engravings, and other like miscreants would gladly avail themselves of such a plea ; but, while for such the door of the gaol is set warningly ajar, Mr. A. T. Bolton's jerry-builder may still pass it with his tongue in his cheek. In truth, the cause of healthy art is not served by high-flown talk about the artist being degraded by the thought of reward. The whole range of artistic biography shows the spur of need and the hope of reward—either in gold pieces or in admiration or in both—to be necessary for the artistic temperament to produce its finest work. Were it otherwise the masterpieces would come from men of private means, and the needle's eye would offer no difficulty to the rich man's camel. And the first duty of the artist, as of any other good citizen, being to pay his rates and taxes and keep his family in comfort, he owes it to himself and to his neighbours to prevent robbery of his just remuneration. The doubts that have been expressed by a few architects as to the desirability of legal protection for architectural works arise almost wholly from misconception ; arising, I think, partly from the use of the word "copyright," which, in England, has come to connote the use made of an author's property in his work rather than the property itself, and partly from the idea that such protection is a novel experiment which may prove impracticable in working. I have not yet had the opportunity of perusing Mr. Buxton's Bill with sufficient care to justify my criticising it in detail. It is evidently far from satisfactory as it stands, and will require very careful consideration by the Royal

* The able pleading of the Institute representatives for Parliamentary ratification of the Berne Convention is set out at length in the JOURNAL for 12th June 1909.

Institute; but, with your permission, I should like to state very shortly what we architects are asking for. For the purpose of the author's protection the practice of the art of sculpture will be found almost exactly analogous to that of architecture, and we ask that the latter should enjoy equal and similar privileges and be placed on the same footing as its two sister arts. This, of course, involves no restriction to the artist in dealing with the material of the past, the "domaine public," as it is generally called, from which we all seek the inspiration which comes of knowledge and tradition, and into which are gathered all works as their period of protection expires. Nor does it prevent the studying, or even the copying of living masters, provided that in the latter case they do not themselves object; but we maintain that if an architect's work be reproduced, its author should have the right to profit thereby and not some other person who did not design it. As to the actual working of the proposals, it is forgotten, even by those in whom we should expect better memory, that they have long since been in force in other countries—in France under the Revolutionary law of 1793, defined and amended in 1902—and that there exists a clear jurisprudence of decided cases. The question of "artistic character" is extremely simple, and must not be confused with that of "artistic merit," which, as you point out, would involve judgment by the Courts on æsthetic points. A Court would only be concerned to decide whether or no design was involved as well as mere building construction, and the "Christensen *v.* Henriksen" (Copenhagen), "Lafont *v.* Lallement" (Nantes), and other cases have effectually disposed of attempts to justify piracy by denying artistic character in the work. Another question which I am sometimes asked is, whether slight alterations in a reproduction are not sufficient to render the forgery safe. The best reply is to be found in the judgment of the Tribunal of Antwerp in the "Hompus" case, where this defence was set up. "Such differences in detail," said the Judge, "far from disproving that the monument erected by the defendant is a forgery of that of the complainant, prove on the contrary that the defendant has sought by differences of detail to disguise the forgery." Your own words admirably sum up the whole matter. "It is not in the best interests of architecture that second-rate men should steal, and spoil in stealing, the artistic inventions of their contemporaries."

University of London, University College.

A course of three public lectures on Town Planning is announced to be delivered by Mr. H. V. Lanchester [*F.*] at the School of Architecture, University College, as follows: 6th Oct., Ideals of the Past; 13th Oct., City Developments at the Present Time; 20th Oct., Possibilities for the Future. The lectures commence at 6 P.M.

A course of eight public lectures on English Domestic Work will be delivered by Mr. J. A. Gotch, F.S.A. [*F.*], as follows: 27th Oct., Keeps and Fortified Manor Houses; 3rd Nov., The Later Mediæval Houses; 10th Nov., The Coming of the Italian Influence; 17th Nov., The Homes of Queen Elizabeth's Courtiers, Exteriors; 24th Nov., The Homes of Queen Elizabeth's Courtiers, Interiors; 1st Dec., The Drawings of Jacobean House-Designers; 8th Dec., Inigo Jones and his Successors; 15th Dec., Eighteenth-Century Homes.

All lectures will be illustrated by lantern slides. The lectures are intended mainly for architectural students, but are open to others. Tickets of admission will be issued without fee. Applications for tickets should be addressed to the Secretary of the College, or to the Clerk of the Carpenters' Company.

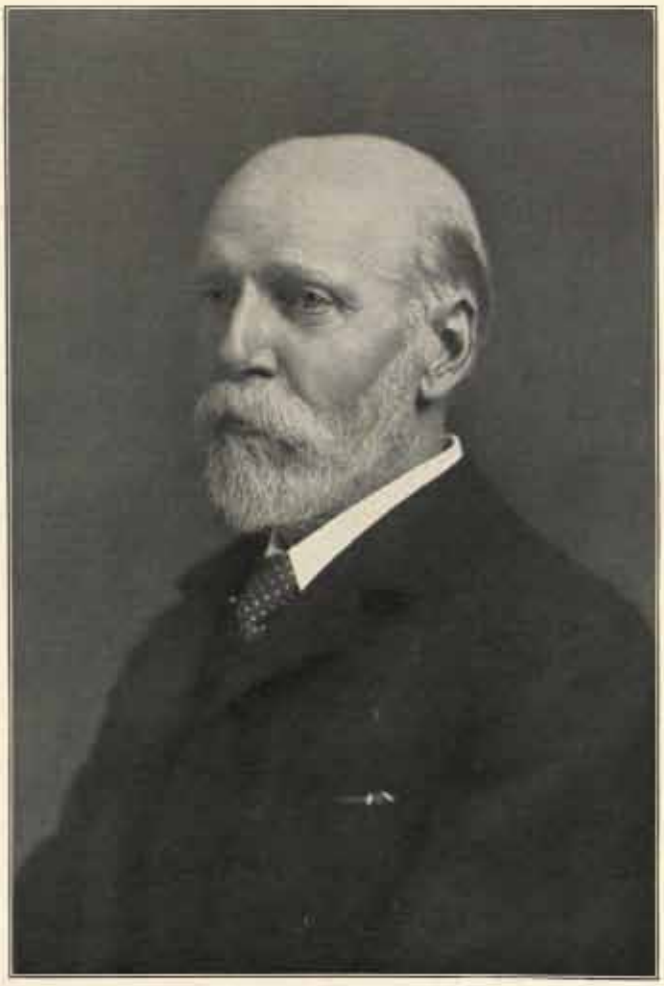
Diploma Course in Building at Glasgow.

Professor Charles Gourlay, B.Sc. [*A.*], who has the direction of the classes in Architecture and Building Construction at the Glasgow and West of Scotland Technical College, writes calling attention to the newly instituted Diploma Course in Building for day students, particulars of which are given in the recently issued College Calendar. The standard set is a high one, as students before entering the Diploma Course are required to pass an entrance examination in general education equivalent to that to the Scottish Universities. The idea is to set before the rising generation of young men who aspire to be master tradesmen or clerks-of-works a course including a sound scientific and technical training which will thoroughly qualify them for co-operation with architects in the erection of buildings. For evening students there are Junior and Senior Certificate Courses of three and five years' duration respectively. The College classes are all advanced ones, elementary work being taught in continuation schools which are attended by students before they enter the Technical College.

School of Art Wood-Carving.

The School of Art Wood-Carving, 39 Thurloe Place, South Kensington, which is under Royal patronage, has been reopened after the usual summer vacation, and we are requested to state that some of the free studentships in the evening classes maintained by means of funds granted to the school by the London County Council are vacant. The subjects taught are Wood-carving and Design, Modelling, Geometrical and Outline Drawing in relation to Wood-Carving. The day classes of the school are held from 10 to 1 and 2 to 5 on five days of the week, and from 10 to 1 on Saturdays. The evening class meets on three evenings a week and on Saturday afternoons. Forms of application for the free studentships and any further particulars relating to the school may be obtained from the Secretary.

A Correction.—The notice of the late Sir Thomas Drew in the last issue was credited in error to Mr. A. E. Murray. The article had been reprinted by permission from the *Irish Builder*, and Mr. Murray, a family connection of Sir Thomas Drew, had kindly revised the proof for the JOURNAL.



[Photo: Elliott & Fry.

ERNEST GEORGE, A.R.A., *President* 1908–1910,
Royal Gold Medallist 1896.



THE ARCHITECT AND TOWN PLANNING.

By Professor Beresford Pite [*F.*].

Address delivered at the close of the Morning Meetings of the Town Planning Conference, 14th October 1910.

THE Royal Institute of British Architects brings the formal gatherings of this Town Planning Conference to their conclusion to-day with the subject of "The Cities of the Future," beyond which our mortal eyes do not see. It is of necessity sufficient that the rapturous visions of human progress into bliss embody hopes of glorious architecture and perfect health, but to the architect belongs the primary conception of the ideal as well as the direction of its attainment.

This afternoon's subjects, the Creation of Capitals for the entire Continent of Australia and for the New World of Africa, illustrate the practical bearing of considerations which otherwise might not be devoid of the suspicion of being merely poetic, Utopian, and visionary.

The architect knows well that it is vain to expect imagination to conceive or design to begin without principles, purposes, or precedents—forgive the alliteration—and to the discussion and elucidation of these three factors in the art of the town plan, this Conference, with the indispensable assistance of the Exhibition, has been directed.

What are these principles and purposes? They are many, and are various in their nature—geographical, political, *i.e.* of the police, sociological, and æsthetic—governed on all hands by qualifying conditions, and in detail comprehending the gauge of a tram-line, the precise value of an inestimable and inconvenient fragment of antiquity, and the new English factor of incremental values. Amidst this variety, perplexing and increasing in complexity of regulation, what has this Conference found to be the key to the difficulty and the solvent of the trials of the new problem of Town Planning?

We have it in one word, Architecture, and the architect reaping with keenness the abundant and yet ungarnered harvest of precedent—rich fields indeed, as the walls of the Royal Academy at present evidence—is armed by precedent to lay down the principles by which alone the purposes of the present can be made effective both for to-day and to-morrow, for our generation and for history.

What is true in the study of buildings is equally true in the study of cities. The mental quality which speaks to us in the ever wonderful architecture of the Greeks was necessarily manifested in their town plans. The indomitable spirit of government by which Rome the city became the empire, organised the laying out not only of forums and highways, but cities and provinces, and the architect reads this, more clearly than in the cyphers and symbols of literature, in the orders of the elevation and the rhythm of the plan.

It needs no asseveration to enforce the obvious truth that principles of municipal life and polity were as potent, and much more so, in ancient Rome than in any modern community, and

the conclusion must ensue that the survival of a pre-eminent architectural character and expression gives the keynote for the Town Planning movement in our own era. That the Middle Ages, with no organised craft of architecture as an art, have left such fascinating proofs of the charm and serviceableness of natural methods of building and design, if one may so speak of their less sophisticated manner, again emphasises the fact that the enduring elements of town planning are architectural, and that in the study of buildings lie the seeds of fruitful beauty for street or city.

The individual genius of the men of the Renaissance becomes a nearer and more characteristic guide for us. Almost the only surviving impression of contact with a great Renaissance plan is that of architectural grandeur, generated by devotion to a classic vision of the past, applied to the purpose of extending and glorifying a city, a place, or a palace. The glory of a city is its grandeur, the gracious width of its avenues, the adjusted proportions of its squares, and accompanying these of necessity, healthy spaciousness and ordered amenities.

It is to such precedents that this Conference of Architects directs attention for the education of the public conscience and the elevation of its patriotic ideal.

Our assemblies have been deeply touched by the eloquent enthusiasm of our Honorary President for the city of his manhood, fame, and home. Such sympathetic affection for her very stones is an infection which we will learn to enlarge and cultivate each in his own place, for we have, as architects, committed to us the possibilities of the promotion or depression of civic beauty and amenity.

This quality of an architectural charity which begins at home we commend most earnestly to all responsible authorities. In this relatively free country, laymen untrained and irresponsible to artistic criticism become the custodians of our civic heritages and the promoters of town development. To the mayors, the chairmen of municipal committees, to their permanent officials, surveyors and engineers, this Institute appeals, in the higher interests of the community and our national repute, not to neglect the mother art of architecture, which, taking up the common purposes of building, dignifies the commonplace and renders the necessary gracious and pleasant; for the same art, with like instinct and power, can make the commonest and most local street improvement subserve a high purpose of improvement and beauty, if only it be considered as a subject worthy of the highest and best effort of those qualified by study, experience, and grace to serve the art of its architecture.

The town is too precious a possibility, if not already a possession of beauty, to be entrusted to consideration only of its expert surveyors and engineers. The problems are architectural, and will be ultimately judged as such.

In furtherance of help in this important matter to all town authorities undertaking the preparation of schemes, the Royal Institute of British Architects extends its heartiest co-operation. The Town Planning Committee of the Institute, which at the inception of the recent legislation was constituted to consider and advise upon its progress, was met and welcomed by Mr. Burns in conference during the progress of his Bill, and has now the satisfaction of seeing how successful and timely has been its suggestion to the Council of the Institute to invite an International Conference on Town Planning. The Committee on Town Planning will continue its labours, and will shortly issue, after the Transactions of the Conference have been published, a report on the conclusions of the Conference adaptable to the present needs of authorities preparing town plans.

The material offered to the Conference by the amity of our *confrères* will be invaluable to this end. The exhibition of plans and designs has an educational force of great power. The new world is redressing the balance of the old, and the past is reproducing itself in the present. For the Papers, for the exhibits, for the personal contributions to the discussions, and for that delightful spirit of universality in art sympathy which is one of the greatest common qualities that

men share in spite of all other divisions of race, government, and temperament, for all these the Royal Institute of British Architects is profoundly and ardently thankful to the members. May our art yet flourish, and amidst the many conflicting streams of life continue to make for Peace, Health, and Joy!

THE TOWN PLANNING CONFERENCE: A REVIEW.

By W. R. Davidge [*A.*].

THE Conference is over! The greatest and most widely embracing reunion of the world of architecture has been satisfactorily and enthusiastically achieved, thanks to the initiative of the Royal Institute of British Architects and to the energy of those who have for months past worked so whole-heartedly in its cause under the skilful direction and inspiration of the Secretary-General, Mr. John W. Simpson. The Institute has every reason to feel proud of the part which it has been privileged to take in calling together such a Conference at such an opportune moment. Probably never before has such a gathering of experts—architects, engineers, surveyors, and councillors—been assembled with such an object—the benefit, the lasting benefit of the civilised world and its teeming millions in every clime.

From practically every country, European or American, and from all corners of the Empire came the units which composed this great international gathering, and the deliberations of the Conference thus possess a value far above any purely national standard. The Town Planning Committee of the Institute are doing well in their decision to continue the work of collecting and collating information on this important subject for the benefit both of English architects and their foreign *confrères*.

The splendid exhibition at the Royal Academy of town planning drawings and models drawn from all parts of the world forms an object lesson of what has already been accomplished in the field of town planning. The exhibition will prove an inspiring study for architects, and the artistic spirit embodied in so many of the drawings will inevitably arouse our enthusiasm for a subject which has no equal in the broadness of its conception and in its possibilities for the future.

The visits arranged in connection with the Conference have been much appreciated by our visitors, and opportunities have been given for seeing the work executed in connection with our garden villages, and also examples of the more formal lines adopted in the work of Sir Christopher Wren and in the stately town houses and collegiate buildings of which England is justly proud.

On the more festive side, the conversazione at the Royal Institute, the receptions arranged by the courtesy of the Lord Mayor and the City Corporation at the Mansion House and Guildhall, and by the American Ambassador at Dorchester House, and the Banquet at the Hotel Cecil have all tended to encourage the sense of fellowship and good-comradeship which has been such a feature of the Conference.

The main work of the Conference, however, has been in the papers and discussions which have been carried on continuously throughout the week in the new galleries now forming part of the premises of the Royal Institute. So keen has been the interest displayed in the discussions that overflow meetings have in the majority of cases had to be held, the authors of the papers reading them successively to two distinct audiences, the papers in most instances being illustrated by lantern views.

One of the conclusions brought out in the discussions stronger than any other was the extreme practicability of town planning. With our older cities and with their still-growing extensions much is possible in the way of immediate improvement. But this is also an

international Conference, and, as was well pointed out by Mr. Andrew Taylor in the course of the discussion, "Now is the time for Canada and our vast colonies to town plan; they have an opportunity that no country in the world has ever had before." On behalf of the London County Council he at the same time expressed the great appreciation and interest which he and his colleagues on the Council felt for the Conference and all that it meant for London and other great cities.

Another of the results of the Conference has been the revelation of the unanimity of opinion of those most competent to pass judgment on the apparently divergent views of the various schools of thought. The eminent experts who have visited us are unanimous in the opinion that the English cottage home is the ideal one, and that the tall and costly tenement buildings so common in German towns are not in any sense desirable. The high cost of land and the heavy expense of paving the very wide streets, however, leave no option but to erect such buildings, and a word of warning is on this account given against the requirement of unnecessarily wide thoroughfares, unless largely laid out as gardens.

One of the greatest difficulties in large towns is to deal with the smoke nuisance, which ruins both buildings and gardens alike. Mr. Burnham, the eminent American architect, and Chairman of the U.S.A. Fine Arts Commission, expressed the opinion that the time was coming when coal would be burnt at the mines, and power, light, and heat transmitted by wire. When that day comes, the air of our towns will be purer and the roofs of our houses perhaps our most attractive retreat.

The struggle between the formal and the picturesque is but another phase of the warfare between the classic and the mediæval schools. Each is right in its place and each may be equally beautiful. As Sir William Richmond well said, "Effect is promoted by balance of symmetry and unsymmetric treatment."

It is also refreshing to be reminded that the ancient architects of Greece and Rome experienced much the same difficulties and solved them in much the same way as their modern successors. Professor Percy Gardner, in a paper on the planning of Hellenistic cities, states that at Cnossos in Crete there has been found beneath a palace of the second millennium B.C. a system of drainage more advanced than is the drainage of Crete to-day. Architecture and the planning of cities in the ancient world went through the same two phases that they have gone through in the modern world. The old cities of Greece, in the age before Alexander the Great, consisted of narrow, winding streets bordered by poor houses. The public buildings were large and splendid, the private houses were shelters for the night. On the Ionian coast of Asia Minor cities were more orderly and stately. While the agora or market-place in the old cities of Hellas was merely an irregular open space where streets met, an Ionian agora was square, with porticos round it, and lying in the heart of the city. In the fifth century B.C., however, the Greeks seriously took up the matter of town planning, and towns were planned with streets at right angles to one another. Still more important, as the sites were new, it was not necessary to consider either the sacredness of certain spots which the gods would not surrender, or the vested rights of individuals.

The time of Alexander the Great was, however, the great age of city founding, and within a century or so there sprang up a number of cities destined to become populous and wealthy—Alexandria, Antioch, Seleucia, and Pergamon, the remains of which have been carefully excavated in recent years. The Greeks, being essentially city-dwellers, had no gardens, and at most but a few trees or shrubs in an inner court; open spaces with lawns, trees, and flowers were almost unknown. The Greek idea was to produce a well-planned and self-complete township enclosed by a wall and set in the midst of fields and woods.

Town Planning in the Roman World was dealt with by Professor F. J. Haverfield. It was the custom of the Romans under the Republic, as of the Greeks before them, to send out emigrants

in compact bodies, fit to establish a small town or *colonia* forming a fortified group of houses covering thirty to forty acres and possessing municipal life and government. Under the Empire it was otherwise. The great gift of the Roman Empire to Western Europe was town life, and the creation of new towns went on apace. The form which these towns almost invariably took was the familiar rectangular street plan, the form which men seem to have either invented or instinctively borrowed for their systematic town planning. Not all Roman towns show this chessboard arrangement. Pompeii is somewhat irregular in planning, but in this instance the *colonia* was grafted on to an older town. In the Roman town plan the forum or central market-place was not an *open* space, but an enclosed colonnaded yard with public buildings surrounding it. The ancient law does not tell us much about any control of city magistrates over the plan, beyond the normal administrative control of water, sewerage, &c. The area of Roman towns was almost always small, from 100 to 200 acres at the outside, hence utterly unlike the rectangular plan applied on such a large scale at Buenos Ayres or Chicago. There were few or no industries carried on, and the need for public gardens was consequently not felt.

Dr. Thomas Ashby, Director of the British School at Rome, traced the history and gradual development of Rome. The Palatine Hill, the nucleus of the city, was, no doubt, occupied by the original settlers owing to the natural advantages of its position. The hill was roughly rectangular in shape, and hence was called Roma Quadrata, its original area being some twenty-five acres. The cliffs were originally far more formidable than now, with deeper valleys beneath them. The first extension of this settlement towards the east and south formed the Septimontium, and the next stage in the development of the city is marked by the "Servian" wall, which on the west and east coincided with the *pomerium*, while on the north and north-east it included a great portion of the table-land from which the Quirinal, Viminal, and Esquiline originate, and on the south it took in the Aventine. It thus enclosed what came to be known in the time of Cicero as the Seven Hills of Rome.

The lines of the streets were in the main dictated by the natural features of the site, with its seven hills and their intermediate valleys, and by the position of the gates from which issued the roads upon which the supremacy of Rome depended. The city as a whole, however, seems to have grown up quite unsystematically; it had narrow and ill-built streets, and the central portion between the hills and the river was cramped and overcrowded.

Julius Cæsar, in 54 B.C., was the first to grapple with the problem, by improving at great cost the communications between the Forum Romanum and the northern portion of the city, and the regulating of the bed of the Tiber. Many emperors continued the work which Cæsar had begun. Nero compelled private owners to reconstruct their houses in a more substantial way and to allow greater width for the streets. Later on, the troublous times between 235 and 284 A.D. allowed of little building activity, except for the hasty construction of the walls of Aurelian and Probus. The walls are of brickwork, and have, of course, dictated in a large measure the subsequent topography of the city. After the Barbarian invasions and the destruction of the aqueducts on which the water supply depended, the upper portions of the city were deserted, and mediæval Rome occupied only the lower portions of the ancient city. It was only after 1870 that the upper parts of the city began to be once more inhabited, and even at the present day the south-west portion of the area within the Aurelian walls still gives an excellent idea of the quiet and peaceful beauty the disappearance of which all must regret. Much has been sacrificed that might without detriment have been spared, owing to the needs of the modern capital. Professor Lanciani in the discussion that followed gave some interesting information as to the recent excavations on the site of the ancient Ostia, which had revealed a perfect example of rectangular planning.

The evolution of the town-planning ideal since the Renaissance formed the topic of a most

interesting paper by Dr. Brinckmann, of Aix-la-Chapelle, and in a remarkably clear exposition of the subject Dr. Brinckmann traced the gradual development of such towns as Florence, Nancy, and others of the period. Modern German town-planning, he thought, had turned strongly in the direction of mediæval picturesqueness, as exemplified in the old towns of Nuremberg and Rothenburg in Bavaria. Dr. Brinckmann, at one of the evening gatherings, was good enough to give a second short address on the Gothic Towns of Southern France.

"The Civic Survey" was to have been the title of a paper contributed by Professor Geddes, but unfortunately both he and Sir William Richmond were prevented by illness from being present. The latter's paper dealt with some factors in town planning which are not always taken into consideration. The smoke nuisance was one which steps should be taken to mitigate as much as possible by insisting on smoke-consuming apparatus being provided, and every encouragement should be given to the provision of smokeless coal; indeed, it might be part of the town-planning enterprise to devise, especially for the dwelling houses of the poorer classes, some form of central heating stations from which the necessary warmth might radiate. With the abolition of the smoke nuisance, roof gardens and other amenities would become a possibility.

The Growth of Legal Control over Town Development in England was the subject of a paper read by Mr. H. Chaloner Dowdall, Barrister-at-Law, in which attention was drawn to the growing legal powers gradually acquired by local authorities during the past century. The Town Planning Act of 1909 would, on account of the Constitutional precedent which it has made, be followed with keen interest on all hands. The Act, in short, gave to the Local Government Board a perfectly general power, subject to certain limitations, to make local Acts of Parliament, under the name of "Schemes," with reference to streets, roads, and other ways, including stopping up or diversion of highways; buildings, structures, and erections; sewerage, lighting, water supply, ancillary works; extension and variation of private easements, and all incidental powers.

The subject of Land Tenure and the various stages of procedure in the acquirement of land for town-planning purposes was dealt with by Mr. C. H. B. Quennell, in an excellent exposition of what is generally regarded as a most complex question. Land tenure in England, with all its centuries of strife, must necessarily be complicated. From the days when the freeman was the freeholder and the landless man a slave, to the feudalism introduced by William the Conqueror, and the beginning of its breakdown in the thirteenth century, right down to our own times, the history of land tenure is almost the history of England.

Professor Baldwin Brown, in pleading for the preservation of ancient features, reminds us that theoretical town planning in straight lines and rectangles is by no means new. It is at least as old as ancient Babylon. But the surface of the earth is of infinite variety in contour and already bitten with lines ploughed out by the comings and goings of many generations, and the arrangement of new streets must naturally follow the configuration of the site. The historic past has the very strongest claims on our attention. The Housing and Town Planning Act itself contains the refreshing Clause 45, which forbids the acquisition for housing purposes of any land which is the site of an ancient monument or other object of archæological interest, and in a later Schedule includes under the general provisions which may be prescribed "the preservation of objects of historical interest or natural beauty."

Mr. C. Mulford Robinson, of Rochester, U.S.A., provided the Conference with a breezy contribution in which he pointed out the defective way in which our modern idea of standardising the width of streets worked in practice. The same width of street is required, no matter what its purpose or position may be; in one case it may be barely sufficient, but in the majority of cases the excessive width is wasteful and extravagant, the street construction in many cases costing more than the land itself. In the subsequent discussion this point was strongly

emphasised and confirmed by many speakers, the high cost of land in Germany being stated to be largely due to this cause.

M. Louis Bonnier, "Architecte-voyer-en-chef" of the City of Paris, followed with a most interesting contribution, in which he detailed the thirty-one special ordinances in force in Paris with reference to the architectural features of particular points, such as the Place des Vosges, Place Vendôme, and Place de la Concorde, showing how such "town planning" requirements had been affected by the passing of time. Two-thirds of these architectural "servitudes" in Paris have nearly all been complied with, the abandonment of the others being largely the work of previous periods if not of the originators themselves.

A fresh note was struck by Mr. H. V. Lanchester in his paper on "Cause and Effect in the Modern City." "A mere description of existing types," he said, "is of little value compared with a brief study of the circumstances producing such types. Only by such a course can we secure the knowledge necessary to bring our work in the future into harmony with the natural forces, and thus ensure that what we do should be on sound lines and likely to endure." He was of opinion, and no doubt rightly, that ideal influences are more powerful than material ones, and form the real motive force in the development of the community.

An interesting comparison of the town planning and legislative powers possessed by the Scandinavian towns, especially in Sweden, was provided by Dr. Lilienberg, City Engineer of Göteborg, and the "Restraint of Advertising" was dealt with in a paper by Mr. Richardson Evans.

The importance of scale, appropriateness, and fitness in connection with all city improvements and in the details of town buildings was emphasised by Professor Adshead. An interesting suggestion for a girdle boulevard encircling London at a distance of about ten miles out was contributed by Mr. G. L. Pepler. Some such proposition will no doubt in the long run eventually come to fruition, though it is evident that such a scheme could be but a commencement of something far larger and more costly. Such a circular girdle with a diameter of nearly twenty miles would, moreover, involve the traffic using it in an unnecessarily wide detour.

The suggestion which has often been made that natural beauties of watercourses such as the Brent Valley should be preserved as narrow strips of parkland is one that deserves serious attention by the County Councils controlling the various streams before it becomes too late. The subject of public parks and gardens was also touched upon in a most interesting paper by Mr. T. H. Mawson, and by Colonel G. T. Plunkett, R.E., and Mr. Basil Holmes.

Mr. Arthur Crow, later in the Conference, made a series of valuable suggestions as to the treatment of congested areas. He proposed that the outlying suburbs should eventually be consolidated into ten encircling "cities of health," each surrounded by open spaces and each in direct mono-rail communication with the centre.

Mr. Crow also made an important suggestion for amplifying in considerable detail the proposals made by the London Traffic Commission a few years ago for the construction of a broad double avenue, 225 feet wide, running east and west from Lea Bridge to Shepherd's Bush Green—a distance of about ten miles—the centre of the avenue being treated as a parkway throughout the length. He also drew attention to the provisions existing in the London Building Acts, which, unfortunately, permitted even on exceedingly narrow streets the erection of new property on old sites to a height of eighty feet, in addition to the two further stories allowed in the roof. Another defect in the existing law as regards London he considers should be emphasised. An existing road often contained an awkward projection, in some cases reducing the width of the road to such an extent that there might be only room for one vehicle to pass at a time. This projection might, nevertheless, be legally perpetuated, provided the plans of the old buildings were properly attested.

The meeting on Thursday was perhaps more crowded with interest and even more

international in character than the other meetings. Under the chairmanship of Mr. Daniel H. Burnham, of Chicago, papers on City Development and Extension were read by Mr. W. E. Riley, Superintending Architect of the London County Council, Dr. Ing. H. J. Stübben and Professor Eberstadt of Berlin, M. Augustin Rey of Paris, and Mr. Raymond Unwin. The latter, to whom the success of the splendid exhibition at the Academy was largely due, said that the Town Planning Act had wisely concentrated the attention of town planners in England mainly on the development of the still unbuilt-on areas round the existing towns. Suburban areas could not, however, be considered by themselves. City planning really involved the whole problem of the proper organisation of city life. The high degree of specialisation upon which modern industry and life depend pointed to the probability that a very large proportion of the population would continue to live in or immediately about great city centres. The growth of our industrial towns during the last century found us unprepared. We needed to bring into our city life that guiding oversight and direction in making the best of the facilities afforded by the position, and that proper relation of all the different parts so essential in a great modern industrial town. We found, for instance, the land all along the railway side and canal banks crowded with cottage dwellings, while many industrial concerns for which direct access to these transit facilities is most important had to be scattered about in other parts of the town, often destroying the amenities of some of the best residential areas, and entailing a constant stream of heavy traffic through the streets to and from those very railways and canals along the banks of which they should naturally be situated. The first thing to be done in relation to the extension plan was to determine the general lines on which the city should be encouraged to develop, which areas should be reserved for industrial purposes, for new railway accommodation, docks, harbours, and warehouses, and which for residential purposes. It was important that as much intermingling of classes as possible should be brought about in suburban districts. In every way it was bad to allow large areas to be covered by houses of exactly one size and class only. To make wholesome dwellings they must either give to every house a considerable extent of garden, which meant spreading the town over an excessively wide area, or they must group buildings together in certain parts, leaving adequate open spaces around each group. This latter seemed to him the natural course, as it rendered easier and less costly the distribution of water, light, heat, telephone, and all such conveniences, and also gave greater scope for architectural effect. We should also have to break away entirely from our traditions in the matter of road making, and accept the principle that roads should be of varying widths according to the purpose they were to fulfil.

Mr. W. E. Riley, in a paper on City Development, said that the fundamental defect in London development had been its lack of any systematic plan. London might be regarded as one of the most costly examples of the evils resulting from the lack of proper appreciation of the aims which the Conference was convened to promote. For long past the ratepayers had been called on to pay for the endeavours of their rulers to remedy the default of their forefathers. The London County Council up to December 1909 effected or was in course of carrying out 133 improvements, estimated to cost £8,559,516 net. It also agreed to contribute £1,455,120 towards the cost of 486 local improvements. The net amount to which the Council was committed since its constitution in 1889, without deducting the contributions to be made by local authorities, averaged £500,732 per annum, the total length of improvements undertaken being about thirty-one miles. The Council's predecessors, the Metropolitan Board of Works, between 1855 and 1889 expended £10,113,392 net on constructing new and widening old thoroughfares, and also paid £1,004,086 towards the cost of local improvements. The outlay of the City Corporation had also to be added to these figures, the widening of Fleet Street and Bishopsgate Street alone being estimated to cost nearly three-quarters of a million sterling. Possibly this large outlay would provoke no complaint if only a satisfactory and commensurate result were perceptible,

but we could not evade the uneasy feeling that the result was utterly inadequate. London was still without any *motif* of systematic development, or without proper street facilities for communication with the outer suburbs.

Paris had 42 roads radiating into the surrounding country; London, with a population twice as large, had only 20. Paris had 102 miles of streets 98 feet or more wide; London had only 8½ miles in all of streets of that width. The unsystematic extension of London could not be ascribed to any lack of theoretical appreciation of the importance of the question. Select Committees and Royal Commissions had met and reported with frequency and perseverance during the last century, and, to go farther back, there were the far-seeing proposals of Evelyn and Wren at the time when 436 acres of the City were cleared by fire. Had Wren's scheme been carried out, it was highly probable that the Kingsway improvement would have been unnecessary. The location of the railway termini in London afforded an equally flagrant example of disregard of the most elementary principles of town planning. Quite apart from the æsthetic advantage of providing a dignified and attractive setting to such important centres, the congested conditions of traffic which so frequently obtain bear witness to the disastrous results of placing such conspicuous buildings in crowded districts without the provision of adequate open spaces. Mr. Riley also touched upon the inadequacy of the building laws, the requirements as to width of streets and space about buildings contained in the Building Acts being very restricted in scope.

The most pressing need for London was to establish the main arterial communications on a large and courageous scale, to provide for the inevitable expansion of the next one or two decades. The Traffic Branch of the Board of Trade was at present inquiring into the sufficiency of the arterial roads of London and the necessity for and direction of future outlets. Whatever was done to solve the problem of controlling the future growth of London, singleness of action was absolutely essential. In Greater London, beyond the County boundary, there were five County Councils, eight boroughs, sixty Urban District Councils, fourteen Rural District Councils, and fifty-five Parish Councils. The parochial aspect must be eliminated, not only if the scheme was to produce the best results, but if a scheme was to be formulated at all for the creation of a Greater London developed on rational lines.

Dr. Stübben's descriptive address on the progress of town planning in Germany, with its excellent lantern illustrations, was followed with the utmost interest, and was still further supplemented by Professor Eberstadt in an address on Berlin, with special reference to the recent Greater Berlin competition designs. Professor Eberstadt's appeal to the human side of his audience was very marked and his speech was probably one of the most warmly appreciated.

A paper outstanding from what its author calls the larger issues, by reason of both its subject and the way in which it was treated, was Mr. E. A. Rickards' address on "Civic Ornamentation." Sculpture, flowers and plants, monuments, and even temporary decorations and illumination, were delightfully touched upon, though one cannot resist the feeling that perhaps the sentiments expressed were in some respects unduly scathing.

The title "Cities of the Future" conjures up all sorts of imaginative possibilities, and M. Eugène Hénard's peep into the future of our cities was quite refreshing in its suggestion of communities that will have everything done for them on labour-saving and hygienic lines. Vacuum cleaning, dust removal by suction, pneumatic letter and parcel delivery, liquid air for refrigeration, petrol for heating, &c., supplied through service pipes, mains for sea-water and pure air direct from the seaside were all, M. Hénard thought, within the possibilities of the future. In the centre of each street would be a large fireproof main for conveying away the smoke, assuming that the old-fashioned method of coal fires was still in use, although it was to be hoped that smoke-producing chimneys would eventually be prohibited and replaced by oxygen stoves,

permitting complete combustion. To provide for these services a space sufficient to contain all the necessary installations would have to exist under every roadway.

Mr. L. Cope Cornford approached the subject of "The City of the Future—its chances of being" from quite another point of view—that of the layman, and his outspoken criticism, veiled under a genial good-humour, was greatly appreciated by his audience. "The future of English cities and villages," he said, "does not depend upon the collective gropings of popularly elected bodies, but upon their ability to recognise the fact of their own natural, but fathomless, ignorance. The chance that the individual citizen may obtain his peaceful solid little home depends entirely upon the measure with which he understands that architecture is an art and that none save those who have dedicated their lives to her service can hope to achieve a good thing. But the individual citizen must do his part. All the architects in the world cannot save him, if he professes a respect for law which he does not feel, a desire to get a learning which he really despises, an aspiration towards the possession of a beautiful home which is no more than the ambition to be a little more pretentious than his neighbour. The chances that the ideal city of the future will ever come into being depend upon that freedom of the artist which can only be conferred upon him by the layman.

Mr. Daniel H. Burnham, Chairman of the Commission of Fine Arts, U.S.A., spoke on the future of cities under a democratic Government and of the town-planning work executed in the United States. The inception of great planning of public buildings and grounds in the United States was in the World's Fair in Chicago. The beauty of its arrangement and of its buildings made a profound impression not merely upon the highly educated part of the community, but still more perhaps upon the masses, and this impression had been a lasting one. As a first result of the object lesson the Government took up the torch and proceeded to make a comprehensive plan for the future development of the capital. Since then every considerable town in the country had gone into this study, and there were many hundreds of Plan Commissions at work at the present time throughout the United States. Then came the plan of Manila, capital of the Philippines, made under Mr. Taft, who was then Secretary for War, the initiative having come from him personally. Then came Cleveland, Ohio, which State passed a special law in order to allow large towns to employ expert Commissioners, who are to design the public thoroughfares and parks and to act as censors in all public art matters. Then came San Francisco, where an association of private men undertook to back the work; then Chicago, where the work was undertaken by the Commercial Club, which appointed a committee of fifteen of its members to conduct the enterprise. The work of preparing the suggestions is by no means completed, but in Chicago there have been in three years two hundred meetings of the General Committee, at which hundreds of public men—engineers, architects, sanitary, railroad, city transportation, and other experts—were present. The town-planning men in every city were the ablest in the community, and each felt that he had no duty more serious or more important.

The forceful criticisms of Professor C. H. Reilly on many of our cherished notions will no doubt bear fruit. The house of the future suburb, he said, is, on the one hand, to express something of the new submission of the individual to the community, and, on the other hand, to answer to a more exacting and refined, if less sentimental, taste. What is needed in our garden suburbs is a combination of the refinement of the town with the charm and quiet homeliness of the English country.

The concluding sitting of the Conference, under the chairmanship of Field-Marshal Lord Kitchener, was packed to overflowing, a paper being read on the planning of Khartoum and Omdurman by Mr. W. H. McLean, Municipal Engineer of Khartoum. The closing address on behalf of the Royal Institute by Professor Beresford Pite well summed up in inspiring words the work that the Conference had performed and the work that still remained to be carried on.



9 Conduit Street, London, W., 22*nd October* 1910.

CHRONICLE.

The Town Planning Conference.

Thanks to the Press, the proceedings of the Town Planning Conference have attained wide publicity throughout the United Kingdom, and an impulse will have been given to the town-planning movement that will help forward enormously the educative work which it was the design of the Conference to promote. From every point of view the Conference has been a success. The membership was large beyond expectation, the Papers generally of a high standard of excellence, and the discussions helpfully suggestive and full of interest. The whole programme was carried through without hitch of any kind, and many gratifying letters have been received in praise of the arrangements. We quote the following from Mr. Mulford Robinson, addressed to the Secretary-General :—

"Dear Sir,—As the delegate of the American Conference on City Planning, may I congratulate you, and through you the Institute, on the notable success of the Town Planning Conference ! The sustained interest, the completeness of organisation, and the smoothness with which so vast and complex a machinery has been run is a tribute to efficiency of management and devoted effort which every delegate must recognise.

"The Royal Institute of British Architects has set a high precedent for future town-planning conferences. Our American Conference, the third annual, will probably be held in the early spring, in Philadelphia or Baltimore. It must be a small affair compared with this ; but we should welcome heartily any European delegates who might attend. May I express the hope that it may be our privilege to return in this way some of the courtesies which have been shown to Americans here ?

"To fraternal greetings from the American Conference I beg to add my personal congratulations on the great stimulus which the Royal Institute of British Architects have given to this world-movement, and am, Sir, very truly yours,

"Chas. Mulford Robinson."

After the reception of members by the President and Mrs. Stokes in the Galleries of the Institute on the morning of the 10th, the assembly adjourned to the Town Planning Exhibition at the Royal Academy, a description of which appeared in the last number of the Journal. Mr. Stokes, in formally opening the Exhibition, said that he was glad to have a public opportunity of thanking the members and the President of the Royal Academy for lending them their galleries. He would like to thank the Academy, first, because without the loan of those galleries he did not see how they could have held the Exhibition, and without the Exhibition the Conference would have been rather a tame affair ; and secondly, because he felt that they had, with their open-handed hospitality, enabled architecture in its broadest sense to take a step forward which might be of the greatest use to all of them in the future. They owed a deep debt of gratitude to Mr. Unwin for the catalogue and for getting the collection together. Further, Mr. Eaton, the Secretary of the Royal Academy, had been most kind and helpful to them. The President's motion that a hearty vote of thanks be passed to the Royal Academy for the loan of their galleries was cordially adopted. Mr. John Belcher, R.A., in acknowledging the vote, said that members of the Academy were fully alive to the importance of the subject before the Conference, and were glad to be able to do anything to further the good work of serving humanity in towns and cities. The Exhibition would convince the most careless and indifferent of the great opportunities before the maker of roads and builder of cities.

The most impressive function of the Conference was the Inaugural Meeting at the Guildhall. The Great Hall was filled to overflowing, and every race in the civilised world seemed represented. Delegates were present of municipal corporations, town and borough councils, urban district councils, and of learned and professional societies of various countries on the Continent, in America, and the Colonies. The Lord Mayor, accompanied by the Lady Mayoress and the Sheriffs, was present in full civic state. Presentations of a bouquet of flowers to the Lady Mayoress and the badge of the Conference in gold to Mr. John Burns were made by the little daughters of the President, Miss Barbara and Miss Angela Stokes. The Lord Mayor having formally opened the proceedings by welcoming, on behalf of the Corporation, the Conference to the Guildhall, a vote of thanks was passed to his lordship, and he retired to fulfil another engagement.

Mr. Leonard Stokes then took the Chair, and briefly addressed the assembly. It was, he said, Mr. Burns's Town Planning Act that had made the Conference possible. But architects thought the Act did not go far enough. They would like to see more precautions taken to secure planning from the architectural point of view. But probably Mr. Burns felt that, as architects would have a good deal to do with the laying out of towns, it would be

their fault if the plans were not as they might be. The public were beginning to grasp the fact that buildings could be well planned and well designed throughout, and so give greater comfort and pleasure to their owners without adding to their cost, and what applied to buildings applied equally to streets and towns. At present towns were only popular with the poor, who flocked in large numbers into them, whilst the well-to-do, or as many as were able, all flocked in the other direction. Might not this be because towns were thoughtlessly laid out and badly arranged as places to live in with comfort and without injury to health? It would be obviously to the advantage of the owners of town property if people were keener to live closer to their work; and if towns were made more attractive and healthy in themselves people would gladly live in them, and so save the time and expense now involved in getting to and from their work, shopping, schools, and theatres.

Mr. John Burns, delivering the Inaugural Address, welcomed the delegates on behalf of the Prime Minister and his Majesty's Government, and expressed thanks to the Royal Academy for their generous assistance in providing for what he considered to be the most humane and useful exhibition he had ever seen within its walls. They welcomed this Conference to the City of London because this was the London that Wren beautified, which William Blake idealised in his fantasies, which Milton described as the "mansion house of liberty," and which William Dunbar four hundred years ago described as "the flower of cities all." In this City of London the delegates would see some magnificent structures worthy of the greatest men of any country and of all time; but if they wished for an impression of London at its best from an artistic and architectural point of view they must get up at dawn. He believed the improved appearance of their roads, streets, buildings, and of the city as a whole justified the expenditure which had been made upon it, and that the development of the citizens' environment was the wisest insurance that a city could make. Some would ask whether they could not have too many bridges, too many wide roads, and too many beautiful buildings. He did not think it dawned sufficiently upon such people what the effect was of structural environment, good buildings, and pleasant homes upon the character, temperament, disposition, and energy of the people. Some of the buildings, the foreign delegates would see, embodied the traditions and best qualities of the British race. It was a devotional exercise for a legislator, above all a Minister, to walk by way of New Scotland Yard through Westminster Hall to the House of Commons. The delegates would see in London what they could find nowhere else—400 garden squares, some open, some closed, but all acceptable to the eye and ear, the best, the healthiest, and the luckiest piece of town planning that had ever been done since the building of cities began. Cities were not mere structures of bricks and stones, nor centres only for commerce and trade. They were places where utility, comfort, and beauty could be and ought to be combined, so that those who visited them, or passed through them, could have their artistic senses awakened and cultivated. Places by their beauty, amenity, and grace, and above all by their greenery, created that joy of life which Britons sometimes lacked, and afforded opportunities for recreation to the student wanting respite and the honest labourer requiring rest, and generally elevated the characters of the people. On the other hand, mean streets bred mean men. It was not an accident that the stately homes of England, the delightful country parsonages, the beautiful public schools had produced the Ruskins, the Nelsons, the Wellingtons, the Newtons, and the Darwins. Many reasons had been advanced why he had drafted the Town Planning Act. They were all wrong. When he was an apprentice in Westminster he used to eat his breakfast looking across the river to Lambeth Palace, and his dinner as he wandered in the precincts of Westminster Abbey, and he spent his leisure in beautiful Battersea Park: these experiences had done more to produce the Town Planning Bill, thirty-five years after, than all the criticisms of all the gentlemen who thought they knew more of his ideas than he did himself. Disease could not be fought and exterminated unless we let in sun and air into our houses and streets. So long as there were squalid courts and rotten tenements the country would continue to turn out nerveless mannikins; and motherhood, childhood, the race, and society demanded the demolition of the festering slum and the erection of pleasant towns and dignified cities. Town planning was very belated, but not too late. The gradual reconstruction of a city was a very serious matter for all. If planning were neglected at the beginning or badly done through timidity or lack of imagination, they placed a burden for fifty or a hundred years upon progress, and paid seven or eight times over for their lack of prescience and daring. The owner who thought that parsimony was economy, and regarded a beautiful vista as the eighth deadly sin, had been in reality wasteful. They should not pitch into Mr. Jerrybuilder too much. Mr. Jerrybuilder was creeping up. For proof of it they had only to look at the surroundings of a garden city, where builders tried to live up to the example planted in their midst. (Cheers.) Garden cities were magnificent in themselves, but they were a hundred times more useful in the inspiration they supplied to others. (Cheers.) The Philistine was being taught that houses, roads, and bridges might be made without loss of money to harmonise with beauty. It was with such objects that they did their best to pass the Housing and Town Planning Bill. He had been agreeably surprised at its reception. He pleaded for it an indul-

gent trial, and if it could be, it would be amended and improved so that their object should be secured. (Cheers.) What was their modest object? It was comfort in the house, health in the home, dignity in their streets, spaces in their roads, and a lessening of noises, smoke, smells, advertisements—all the nuisances that accompanied a city without a plan. In tackling this great job modern communities had little to learn which ancient ones did not teach them. Where in other times, for military or other reasons, the streets were narrow and the citizens crowded, compensation was given in large spaces, fine squares, and picturesque buildings. It was true that there were modern disabilities from which communities formerly escaped. Athens did not have 600 miles of railways, as London had, on ugly viaducts, creating *culs de sac* of mean and poor streets, with 500 ugly railway stations spoiled by vulgar advertisements; it had no gas works, and was without the 7,000 public-houses London possessed—nearly all of them at street corners, in positions which ought only to be occupied by banks, libraries, post-offices, and police-stations. We laboured under the disadvantage of having all the apparatus of light, heat, smoke, traction, and rapid communication; but the measure of our difficulty ought to be the extent of our determination to grapple with these abominations. Let them go up the Monument, look westward and see what Cannon Street Railway Station hid of the river and the city. He prayed when he was there that it might fall, as Charing Cross fell, only without hurting anybody. He suggested to the City that while they were building their new bridge, with St. Paul's as the centre of the vista, they should kill two or three birds with the same stone by getting rid of Southwark Bridge and placing Cannon Street Station on the Surrey side. He was quite willing to draft a plan of it to-morrow. He might go on and suggest a similar alteration in regard to the railway at Charing Cross for the benefit of the view from Westminster Bridge. Then they might have a new Waterloo Bridge, a replica of the present structure, but three times its width. One of the most gigantic artistic blunders to be met with in London was due to five or six artists in Chelsea who were so anxious to see the brown sails of a barge just outside their studio windows that they prevented the construction of the Embankment from Battersea to Hammersmith. Immediately the Embankment was killed they got instead the four chimneys of the electric lighting station, which ought to have been down at Barking near the sewage works. How was the Town Planning Act working? It had been in effective operation not more than six months, and already twenty-six local authorities were preparing schemes; many others had the question of the application of the Act under consideration, and the Local Government Board was helping by seeking advice of competent authorities and giving counsel to local authorities. One word of warning he must give to property owners. They were a bit too susceptible to panic. But if they did not sensibly fall in with the modest and kindly proposals of the Act there would be an uprising of popular indignation if the problem of housing and town planning continued unsettled, with the result that they would be less tenderly dealt with than they had been by him. He was there to snatch property owners, like brands, from the burning. The ratepayer, however, must be conciliated. That could be done by appeals to his sense of delight in beautiful places. Another thing to be borne in mind was that civic beauty must not add to the rents.

Earlier in the proceedings a telegram of loyal greeting had been addressed to the King as Patron of the Conference. At the close of his address Mr. Burns read the reply received from Sir Arthur Bigge, which read as follows: "I am commanded by the King to thank the members of the Conference for the expression of loyalty conveyed in their telegram, and to assure them of the interest his Majesty is taking in the deliberations of the Conference."

The meeting closed with a vote of thanks to Mr. Burns, proposed by Sir Aston Webb, C.B., R.A., and supported by Dr. Stübben.

Mr. Davidge's admirable review on preceding pages renders unnecessary at the moment further reference to the main business of the Conference. The Papers, fully illustrated, will be published *in extenso*, with verbatim reports of the various speeches and discussions, and descriptions of the visits and functions, in the Conference "Transactions," which will be published at an early date and issued free to members of the Conference.

The Exhibition of Maps and Plans of London at the Guildhall arranged by the City Surveyor, Mr. Sidney Perks, F.S.A., and the Exhibition of Maps and Drawings from the Institute collections arranged by the Librarian, have not been the least of the attractions of the Conference. The latter collection is now hung in the new Galleries of the Institute, where the drawings are seen to great advantage. The exhibition at the Royal Academy is to remain open until the 29th October.

The Conference Banquet and R.I.B.A. Annual Dinner.

The Banquet of the Town Planning Conference was combined with the Annual Dinner of the Institute and was very largely attended. The function, which was graced with the presence of several ladies, took place at the Hôtel Cecil on Wednesday, the 12th, the President, Mr. Leonard Stokes, in the Chair. Seated at the high table on the President's right were the Hon. President of the Conference, the Right Hon. John Burns, M.P., Mrs. Leonard Stokes, Sir Aston Webb, C.B., R.A., Mrs. D. H. Burnham, the Hon. Sir Schomberg McDonnell, K.C.B., C.V.O., Mr. T. E. Collcutt, Sir Robert Morant, K.C.B., Mr. H. W. Lever, Herr Dr.



MENU-CARD DESIGNED BY PROFESSOR REILLY AND THE STUDENTS OF THE LIVERPOOL SCHOOL OF ARCHITECTURE.

Stübben, Mr. Thomas Brock, R.A., M. Louis Bonnier, Architecte-en-chef de la Ville de Paris, Mr. John W. Simpson, Secretary-General of the Conference, Mr. Leslie Vigers, President of the Surveyors' Institution, Mr. Andrew C. Gow, R.A., M. E. Hénard, S.A.D.G., Mr. E. A. Abbey, R.A., Mr. F. Higgs, President of the Institute of Builders, Mr. George Clausen, R.A., Mr. F. G. Painter, Chairman of the City Lands Commission, Mr. Hamo Thornycroft, R.A. On the President's left were the Right Hon. Lord Redesdale, G.C.V.O., Sir L. Alma-Tadema, O.M., R.A., Lady Webb, Mr. D. H. Burnham, Chairman of the American Commission of Fine Arts, Sir Gilbert Parker, M.P., Sir J. Linton, P.R.I., Sir Wm. Emerson, Sir George Frampton, R.A., Mr. Henry T. Butlin, President of the Royal College of Surgeons, Sir Edward Busk, Mr. Ernest George, A.R.A., Sir George Gibb, Sir R. Paget, Bart., Mr. J. W. Waterhouse, R.A., the Lord Provost of Edinburgh, Mr. Marcus Stone, R.A., Mr. E. Croft, R.A., Professor Rud. Eberstadt, Mr. J. Seymour Lucas, R.A., Mr. T. C. Horsfall, J.P., Mr. Leonard Horner, President of the London Master Builders' Association. Presiding at the lower tables were Mr. Henry T. Hare, Hon. Sec. R.I.B.A., Mr. E. Guy Dawber, Vice-President, Mr. A. W. S. Cross, Vice-President, Mr. J. A. Gotch, Mr. E. L. Lutyens, Mr. Edwin T. Hall, Mr. H. V. Lanchester, Professor Beresford Pite. The following is a complete alphabetical list of those present :—



BACK OF MENU-CARD.

Mr. E. A. Abbey, R.A., Mr. Maurice B. Adams, Mr. T. Adams, Professor Adshead, Mr. H. R. Aldridge, Sir L. Alma-Tadema, O.M., R.A., Mr. H. Ambler, Mr. Louis Ambler, Mr. T. Ambler, Dr. T. Ashby, M.A., Mr. and Mrs. Maxwell Ayrton, Mr. J. T. Baillie, Mr. Francis S. Baker, President of the Royal Architectural Institute of Canada, Mrs. Baker, Mr. E. R. Barrow, Mr. G. Bartlett, Mr. Herbert Batsford, Monsieur J. Bayard (representing the Société Centrale des Architectes Français), Mr. T. F. Beck, Mr. R. Becker, Alderman Archer Bennett, Mr. and Mrs. H. Beswick, Mr. T. Blagburn, Messieurs A. and H. Blomme, Mr. G. L. W. Blount, Mr. A. Blow, Mr. Detmar Blow, Mr. J. Blundell, Mr. Francis Bond, Mr. G. E. Bond, President of the Society of Architects, Cav. Ing. Rodolfo R. Bonfiglietti (representing the Municipal Authority of the City of Rome), Monsieur Louis Bonnier, Architecte-en-chef de la Ville de Paris, Monsieur Marc Bonnier, Professor E. Bourdon, Mr. S. Box, Herr Dr. A. E. Brinckmann, Mr. T. Brock, R.A., D.C.L., Mr. J. S. Brodie, Mr. Andrew Bromley, Mr. C. J. Brown, Professor G. Baldwin Brown, M.A., Mr. Daniel Burnham, Chairman of the American Commission of Fine Arts, Mrs. Burnham, the Right Hon. John Burns, M.P., Hon. President of the Town Planning Conference, Sir Edward Busk, Mr. C. McArthur Butler, Mr. E. Butler, Mr. Henry T. Butlin, President of the Royal College of Surgeons, Mr. S. Bylander, Mr. J. T. Cackett, Mr. R. Calvert, Dr. R. M. Cameron, Professor S. H. Capper, Mr. W. D. Carôe, F.S.A., Miss E. Casciani, Avv. Mario Cattaneo (representing the municipal authority of the City of Milan), Mr. H. C. Charlewood, President of the Northern Architectural Association, Sir George Chubb, Bart., Mr. F. Dare Clapham, Mr. and Mrs. H. Chatfeild Clarke, Mr. Max Clarke, Mayor of Holborn, Mr. G. Clausen, R.A., Mr. Cecil Clayden, Mr. A. Clyne, President of the Aberdeen Society of Architects, Mr. T. E. Colleutt, Mr. W. R. Colton, A.R.A., Mr. Sidney Colvin, D.Litt., Mr. H. J. Copeman, Mr. J. Cornes, Mr. L. Cope Cornford, Mr. Herbert Cox, Mr. J. D. Crace, F.S.A., Mr. E. Croft, R.A., Mr. A. W. S. Cross, Vice-President R.I.B.A., Mr. A. Cullen, Mr. W. R. Davidge, Mr. J. W. Davidson, Mr. T. Raffles Davison, Mr. E. Guy Dawber, Vice-President R.I.B.A., Mrs. Dawber, Mr. A. D. Dawnay, J.P., Mayor of Wandsworth, Mr. W. Dewes, Mr. R. Burns Dick, Mr. W. Glen Dobie, Mr. C. Fitzroy Doll, Monsieur A. Dous, Mr. H. Chaloner Dowdall, M.A., Mr. D. G. Driver, Secretary of the Architectural Association, Mr. A. Drury, A.R.A., Miss L. A. Dunington, Mr. J. R. Dunn, President of the Edinburgh Architectural Association, Mrs. Dunn, Mr. F. R. Durham, Mr. F. A. Eaton, Secretary of the Royal Academy of Arts, Professor Dr. Rud. Eberstadt, Mr. T. E. Eccles, The Lord Provost of Edinburgh, Mr. A. Ellis, Sir Wm. Emerson, Mr. C. W. English, Mr. F. R. Farrow, Mr. T. H. Fleeming, President of the Wolverhampton Architects' Association, Mr. Banister Fletcher, Mr. C. B. Flockton, Mr. E. Forshaw, Sir George Frampton, R.A., Mr. and Mrs. P. M. Fraser, Mr. G. M. Freeman, K.C., Mr. S. Ford, Mr. Matt. Garbutt, Professor P. Gardner, LL.D., Mr. Ernest George, A.R.A., Sir George Gibb, Mr. E. M. Gibbs, Monsieur Gijselinck, Directeur du Service des Propriétés Communales, Mr. G. L. Gomme, Clerk of the London County Council, Mrs. Gonsalez, Mr. J. A. Gotch, Mr. A. C. Gow, R.A., Mr. and Mrs. W. J. Hale, Mr. Edwin T. Hall, Mr. H. A. Hall, Mr. Per. Hallman, Mr. Stanley Hamp, Mr. Henry T. Hare, Hon. Secretary R.I.B.A., Mrs. Hare, Mr. W. E. Haslock, Mr. Christopher Head, Mayor of Chelsea, Mr. P. de Heem, Herr Dr. W.

Hegemann, Frau Hegemann, Monsieur E. Hénard, Mr. F. Higgs, President of the Institute of Builders, Mr. B. E. Holden, Mr. Basil Holmes, Mr. E. H. Homan, Mr. and Mrs. G. Hornblower, Mr. Leonard Horner, President of the London Master Builders' Association, Mr. T. C. Horsfall, J.P., Mr. Ebenezer Howard, Mr. George Hubbard, F.S.A., Mrs. Hubbard, Mr. A. A. Hudson, Mr. John Hudson, Mr. John Hunt, Dr. Hunter, Mr. W. Hutchings, Mr. C. E. Hutchinson, Mr. E. B. l'Anson, Miss l'Anson, Mr. T. E. L. James, Colonel Sir H. Jekyll, K.C.M.G., Mr. and Mrs. G. H. Jenkins, Mr. W. Goscombe John, R.A., and Mrs. John, Mr. and Mrs. Templeton Johnson, Captain Adrian Jones, M.V.O., Mr. Arthur Keen, President of the Architectural Association, Mrs. Keen, Mr. E. A. Kent (representing the American Institute of Architects, Mr. John Keppie, Dr. Hugh Ker, Professor D. R. Keys, M.A., Mr. N. A. Keys, B.A., Mr. Edmund Kirby, Mr. and Mrs. H. V. Lanchester, Mr. E. M. Lazarus, Monsieur M. Lemeunier, Ingénieur-en-chef, Directeur de la Voirie de la Ville d'Anvers, Monsieur H. Lenoble, Mr. W. H. Lever, Sir J. Linton, P.R.I., Mr. F. Litchfield, Mr. T. A. Lofthouse, Miss Lofthouse, Mr. R. S. Lorimer, R.S.A., Mrs. Lorimer, Monsieur A. Louvet, Mr. J. Seymour Lucas, R.A., Mr. K. W. Lundelberg, Mr. E. L. Lutyens, Lady Emily Lutyens, Mr. Ian MacAlister, Secretary R.I.B.A., Mrs. MacAlister, the Hon. Sir Schomberg McDonnell, K.C.B., C.V.O., Herr Dr. March, Frau March, Mr. T. H. Mawson, Mr. W. H. May, President of the Devon and Exeter Architectural Society, Mr. T. de Courcy Meade, Mr. F. C. Mears, Monsieur A. Van Mechelen, Architecte-en-chef de la Ville d'Anvers, Mr. P. W. Meredith, Mr. and Mrs. J. B. Mitchell-Withers, Monsieur R. Moenaert, Professor Gerald Moira, Mr. H. C. Monro, Permanent Secretary of the Local Government Board, Mr. E. C. P. Monson, Mr. Edward Monson, Mr. H. G. Montgomery, Mr. E. Moon, Mr. A. W. Moore, Sir Robert Morant, K.C.B., Secretary of the Board of Education, Mr. J. D. Mould, Mr. and Mrs. John Murray, Mr. G. E. Nield, Mr. H. Nield, M.P., Mr. W. T. Oldrieve, Mr. F. Osler, Sir R. Paget, Bart., Mr. A. E. Painter, Mr. F. G. Painter, Chairman of the City Lands Committee, Sir Gilbert Parker, M.P., Mr. A. N. Paterson, Mr. E. H. Payne, Mr. C. Stanley Peach, Mr. G. L. Pepler, Mr. Sydney Perks, F.S.A., City Surveyor, Mr. S. Perkins Pick, Mr. and Mrs. J. M. Pirie, Professor A. Beresford Pite, Mr. W. A. Pite, Mr. Hayward Pitman, J.P., Count Plunkett, B.L., F.S.A., Countess Plunkett, Colonel G. T. Plunkett, C.B., Dr. Porzelt, Mr. A. N. Prentice, Mr. T. Press, Mr. and Mrs. N. F. Ramsey, Mr. Edmund Rathbone, Herr Karl Rau, the Right Hon. the Lord Redesdale, G.C.V.O., the Right Hon. Sir George Reid, Mr. J. Hall Renton, Mr. Paul Rhodes, Mr. F. G. Rice, Mr. E. A. Rickards, Mr. and Mrs. C. M. Robinson, Miss Fothergill Robinson, Mr. R. M. Roe, Cav. Ing. M. Rondoni, Mr. A. Winter Rose, Mr. A. W. Ruddle, Miss Ruddle, M. Angustin Rey, Madame Rey, Monsieur Schobbens, Mr. R. Weir Schultz, Mr. W. Scott, Mr. A. W. Shelton, Mr. H. Shepherd, Mr. W. Shepherd, Mr. W. T. Sheppard, Mr. W. W. Shillitoe, Mr. C. Simpson, Mr. Gilbert Simpson, Mr. John W. Simpson, Secretary-General of the Town Planning Conference, Mr. B. N. Southall, M. le Comte de Souza, Mr. Marion Spielmann, F.S.A., Mr. and Mrs. J. Spurling, Mr. H. H. Statham, Miss Statham, Sir Alexander Stenning, Lady Stenning, Mr. Leonard Stokes, President R.I.B.A., Mrs. Leonard Stokes, Mr. F. Stollery, Mr. Marcus Stone, R.A., Monsieur L. Strauss, Président du Conseil Supérieur de l'Industrie et du Commerce de Belgique, Monsieur F. de Stryker, Herr Dr. Stübben, Mr. L. S. Sullivan, Mr. Francis Swales, Mr. A. W. Tanner, Sir Henry Tanner, I.S.O., Mr. Henry Tanner, Mr. Andrew T. Taylor, R.C.A., Sir A. Brumwell Thomas, Mr. P. E. T. Thomas, Miss Thomas, Alderman W. Thompson, Chairman of the National Housing and Town Planning Council, Mr. Hamo Thornycroft, R.A., Mr. W. H. Tompkins, Mr. C. Harrison Townsend, Mr. G. Traill, Mr. H. Inigo Triggs, Mr. and Mrs. Percy Tubbs, Mr. and Mrs. Raymond Unwin, Herr F. Usadel, Frau Usadel, Monsieur F. Van Kuijek, Mr. Van Langendonck, Mr. J. B. Van Loghem, Mr. J. A. Van Straaten, Monsieur H. Verrey, Mr. Leslie Vigers, President of the Surveyors' Institution, Mr. H. M. Wakley, Mr. Edward Warren, F.S.A., Mrs. Warren, Mr. S. Warwick, Mr. J. W. Waterhouse, R.A., Mr. Paul Waterhouse, Mr. C. Watkins, Mrs. C. Watkins, Mr. J. H. Watkins, Mr. A. F. Watson, Mr. T. H. Watson, Mr. T. L. Watson, Mr. A. Wauters, Sir Aston Webb, C.B., R.A., Lady Webb, Gzn. A. H. Wegerif, Mr. J. W. Welch, Mr. C. W. Whall, Mr. F. Wheeler, Mr. F. A. White, Mr. and Mrs. W. Henry White, Mr. and Mrs. J. Whitty, Mr. J. A. Williamson, Mr. J. C. Wilmot, Mr. C. L. Wilson, President of the Cardiff &c. Architects' Society, Mrs. Wilson, Mr. J. B. Wilson, President of the Glasgow Institute of Architects, Mr. E. Wood, Dr. Guy Wood, Mr. P. S. Worthington, President of the Manchester Society of Architects, Mrs. Worthington, Mr. T. C. Yates, Mr. Clyde Young, Mr. G. P. K. Young, members of the Institute staff, and representatives of the press.

The PRESIDENT, giving the toast of "The King," said: It is the universal custom in all countries on an occasion like this to drink to the health of those we esteem and the success of the project we have most at heart; and the first toast is always that of the Sovereign. I know that there are a number of gentlemen here representing foreign countries, but I am sure they will join with us in drinking to the health of King George. And for two reasons: first of all, because he is our Patron; and, secondly, because he is his father's son. Edward VII. was known, respected and loved throughout the entire world, and when his son, King George V., is equally well known, I feel sure he will be equally well loved and respected.

The toast was drunk with enthusiasm.

The PRESIDENT: I now have to propose the health of "The Queen, the Prince of Wales, and the other Members of the Royal Family." We have long known the Queen as a good wife and mother, and as such she has reigned in our hearts for many years. The Prince of Wales we look to with confidence to follow the high standard set by his forefathers; and for the Queen Alexandra we have the deepest sympathy.

The toast was duly honoured.

The Right Hon. JOHN BURNS, M.P.: The pleasant task falls to my lot this evening, as President of the Local Government Board, to propose the toast of "The Royal Institute of British Architects and the Town Planning Conference." In proposing the first portion of that toast, may I say to this distinguished and representative audience that this is the first time in my private or official career, either as a member of the County Council, a member of Parliament, or as a Minister, that I have officially come into contact with the distinguished and great profession which you gentlemen adorn. But I have met your President, Mr. Stokes, before. It was twenty years ago when we met—in a crowd, and in a square.

I had been allured and attracted by a choice soul, a great spirit, and a bold artist, William Morris (applause), to take part in some very human proceedings which were not, perhaps, as artistic and precise as many people would have declared at the time; but we went to that particular square that shall be nameless, allured by a great artist. Even then my instincts were architectural, not to say artistic; because we had, I think, the greatest picture gallery in the world on the north; we had religious surroundings in the shape of a beautiful church on the east; the Union Club was on our west; and even then, inclined to town planning, I was mapping out in imagination the line of the new Mall and processional road, and was looking for a seat in Spring Gardens, which, I am glad to say, I got three years afterwards. It was then that I met your President. He had a wand of office that suggested more the majesty of the law than the dignity of art. He was a special constable—and I was a potential defendant. But my artistic associations of that day were not alone with William Morris and the President. An equally great man to the two that I have mentioned—namely, the great John Ruskin, whose views we are beginning, as London grows, to appreciate in their spirit and application more than when he uttered them fifty or sixty years ago—was so impressed with the artistic surroundings of William Morris and myself that he offered himself to be a witness on that occasion. Well, I think, Mr. President, having started my public career under artistic and architectural associations of that character, I had a right, apart from being President of the Local Government Board, to come to your distinguished Conference at the Guildhall on Monday last, and to take part with you in stimulating a movement, and in so doing reviving a great deal that was good in civic art and architecture of the fourteenth, fifteenth, and sixteenth centuries to an extent that can only be appreciated as time goes on. I have one fault only to find with the architects. The architects have, in my judgment, been too long, not on a pedestal, but in an elevated position above the crowd. It is time you got down off that pedestal and mixed with the people, who are in many respects your paymasters. As cities grow, as the population urbanises, as the townward trend increases, it stands to reason that in a city like London, with 5,000,000 to-day—and some day we shall have a Greater London of 9,000,000 or 10,000,000—we should not allow the civic, artistic, social, and architectural to be interfered with by outside bodies who lack London's means, and who necessarily cannot have metropolitan imagination in carrying out big ideas. If London and our other towns are to be the great and beautiful things that they ought to be—if London is to have some of the glory of Greece and some of the beauty of Rome, plus our homely British virtues of a domestic character, it stands to reason that money will be needed. Seventy-five per cent. of the people of England and Wales are living now in urban counties, as against 25 per cent. only fifty or sixty years ago. What does that mean? It means that the engineer, the surveyor, the medical officer, the artist, and the architect will have to be called upon by these great communities for increasingly large and beautiful but expensive schemes; and my suggestion to you is that the architects, having begun so well by inaugurating this Conference, will continue that work by all reasonable means within their power. You artists and architects, as befits your profession in its proper place, show too much reticence and reserve so far as the outside public are concerned. This should not be. Modesty was only made for those who have no beauty—(laughter). Now I want, if I may, to ask you to abandon that reticence, to put aside that false modesty, and to see that if architecture is to be spread as it should be, you must invoke the aid of the populace, the ratepayer, the citizen, the councillor, and the alderman. In London we owe much to you. Over a long succession of years—over several centuries—the architectural profession has given of its best to rectify municipal blunders and social mistakes, and for this you deserve every praise and credit. The chain of architectural ability and genius still goes on. Here and there, now and then, the links may be smaller than their predecessors, but on the average there is a very high level still attained, and no one can look at the London of to-day as compared with the London which I saw as an apprentice lad, I am sorry to say nearly forty years ago, who will not cheerfully admit—as foreign artists admit quite generally—that there is an enormous improvement coming over the architecture of this dear old London of ours. (Applause.) Your Royal Institute, the Academy, the polytechnics, even the elementary schools and technical industrial training schools, are to a large extent responsible for that healthy change.

May I here ask the architects to remember the tremendous responsibility that they exercise towards the great army of men to whom they give their plans and designs to carry out? I never forget this, because I myself am a craftsman; and apart from the bricklayer, the mason, the carpenter, the painter, and the plumber, you hand your plans first to the builder and to the contractor, and the local authorities under your guidance carry out more and more work. Then there are the clerks of works, a type of man I believe unequalled, certainly not excelled, in any country in the world. (Applause.) Now in London there are 2,500 architects, but there are 150,000 men engaged in the building trade in this city! Why do I mention this army of men? Because, under the altered conditions of life, there is no longer the apprenticeship system under which a boy worked up from the elementary school through his apprenticeship until he became a journeyman; and surely you archi-

tects should remember that to the extent that the apprenticeship system declines so is it increasingly necessary that in other ways, whether it be by night schools, polytechnics, or technical schools, you should see that in the carrying out of your great schemes the bricklayer does not lose the power to keep to the fine line. Some people talk about the decline of workmanship. I do not believe in it. I believe that bricks are better laid, so far as precision, square, and angle are concerned, than they ever were; I believe the bricklayer to-day who does the good work that one can see in the neighbourhood of Sloane Street is, judged by precision of work, a better bricklayer than the bricklayer who built Merton Square towers in Oxford four hundred years ago. The men's instincts are good, but if the apprenticeship system is to decay it is for you architects and for public bodies to take steps to see that this fine army of 150,000 men is stimulated and encouraged to keep up its high position and the great responsibility that rests upon them as craftsmen.

I now come, Mr. President, to my next point, which is this: Some people say, "But why should we take the trouble in a city like London to make it beautiful and attractive?" I will tell you. How many people realise that London is now vying with Paris and Berlin, with Vienna and ancient Rome and Greece as a place of attraction? In the opinion of Parisians and Berlinese, London is becoming a dangerous rival from the point of view of attracting people from all parts of the earth. That is shown by the growth of the enormous hotels which you see everywhere. I admit that there are one or two of them in the neighbourhood of Russell Square that might be in better taste—but that by the way. I mention this point on purpose to emphasise the profitable side of the beautiful city. How many people realise that there are 80,000 strange people who come into the city of London every day, or half a million a week, consisting of Americans, Colonials, Frenchmen, Germans, and all the nationalities of the world, attracted by that great building the British Museum, the fine buildings at South Kensington, and other great attractions, owing to what the architects and surveyors are doing to add to the attractiveness, the beauty, the dignity, and the noiselessness of this vast city? I mention these figures in order to get the hotel-keeper on our side—to get the economical ratepayer and all the other people on our side who now say, "If we allow these artists and architects to run loose they will ruin us." It is not true. Beauty is not only attractive, but it is profitable: it pays in the long run; it is economical. It is what every city ought to strive after, and I urge these points so as to get the citizen and ratepayer on our side. Other men may say, "Mr. Burns, it is a long process." No, it is not. Fifty or a hundred years in the life of a nation is not much. I picked up the other day one of Voltaire's writings, and this is what he said of Paris (which is now in many respects the most beautiful city in the world, as it is also the soul and spirit of many fine movements) 150 years ago: "The centre of Paris is obscure and hideous. It represents a period of the most shameful barbarism; only two fountains are in good taste." Now it has taken Paris 150 years to reverse what Voltaire said of it, and, all things considered, in the last fifty years we have made greater progress in the improvement of London than Paris did in a century. I could not help thinking as we were coming out of the Guildhall the other day, looking at St. Paul's Cathedral, how even great architectural minds were not always strictly right in their view as to the necessity of other things besides pure architecture being embodied in their city and town-planning schemes. It may seem almost impossible, but it is the fact that the great Christopher Wren when, after the Fire, he drew up his fine town plan of a future London—would that the Bumbles had allowed him to carry it out!—made this condition: "All churchyards, gardens, and unnecessary vacuities are to be placed outside the town." Since then we have learned that architecture never looks so well as when surrounded by greenery in or near a park or a public garden, and to that extent at least we modern Philistines have improved upon the great Christopher Wren. But he did another thing—one of the greatest inspirations that ever came to an architect—he declared when he submitted his plan that all buildings to be erected should have opposite and in front of them a strip of vacant land to be converted into a garden that was to be equal in length to the façade of any building erected. What was the reason for that wise provision? You have only to go down to Greenwich Hospital and see that beautiful edifice looking like a Portland stone casket on the southern side, and you will see Island Gardens on a piece of land selected by Wren right opposite Greenwich Hospital which would have enabled him to carry out that principle. That is really a great attraction to Greenwich on the north side, and you cannot see Greenwich in all its beauty on the south till you go to Island Gardens, which Mr. Gomme (who I am glad to see here this evening) and myself did our best to retain so that Wren's wish should be secured in the centuries that followed his death. I only mention that to bring my other point forward, which is this: Government Departments are more responsive to the architectural appeal than they used to be. (Applause.) The Government have bought six acres of land opposite Hampton Court so that William's Palace and Wren's great contribution thereto should enjoy what Wren said all his buildings ought to have—a piece of land equal to their length right opposite. To-day no Post Office, Home Office, or Local Government Board dare fly in the face of artistic opinion and architectural suggestion, and project buildings

beyond the ordinary line of frontage to the extent that Government Departments did up to ten years ago. You architects ought to take heart of grace from the interest that there is in this Conference. You ought also to be encouraged by the fact that increasingly you are influencing people in many ways that you cannot conceive, and I sincerely trust that, encouraged by this success, you will go forward and persist in this most important portion of your work, the enlightenment of your masters the public and your masters the ratepayers.

What am I to say about the Town Planning Conference, the second part of the toast? It would be ungracious on my part for me not to say what I do say, that your worthy President deserves the grateful thanks of everybody for his work in connection with the Conference and the Exhibition. (Applause.) But last, and by no means least, Mr. Simpson—(loud applause)—deserves the praise of all London for gathering around him such an earnest band of devoted workers, students, and helpers, who have made this Architectural Conference and Exhibition in London one of the most brilliant public functions that I have ever witnessed in the course of my thirty years of public life. Having said that, I want to point the moral and adorn the tale of a controversy which is of vital importance to London. I am bold enough, having the artistic temperament, to suggest that in the new St. Paul's Bridge, the City Corporation, Parliament, the London County Council, and all the authorities concerned would be well advised if, before they finally settle their plans for the new bridge, they would listen, not only to the engineer, but to the architect and the artist as well as to the policeman, as to where, how, and when that particular bridge should be built. I believe you architects have approached the City Corporation, and I am informed that you are not so well pleased with your reception as you would like to be. I want to put these facts in the most candid and friendliest of ways to the City Corporation, who in many respects have done well architecturally, and to whom on behalf of the poorer people of this vast city I say that London is extremely indebted for the widening of Blackfriars Bridge, for letting the tramways over the bridges and down the Embankment, and for doing a popular and a necessary thing in a bold and generous way, every penny of the cost of which they have, to their credit, paid out of their own corporate funds. Having said that, I would venture to ask the city to remember that if their scheme is carried out there will be four bridges—London Bridge, Cannon Street Railway Bridge, Southwark Bridge, and the new St. Paul's Bridge—in only 800 yards of river frontage. What will that mean? If you stand on Blackfriars now—and Blackfriars Bridge is a fine bridge, though I wish you would not paint the top parapet with oxide of lead but rather have a nice French grey—if you stand on Blackfriars Bridge you cannot see London Bridge or the Tower Bridge because the Chatham and Dover Railway Bridge by Blackfriars completely obstructs the view. Stand on London Bridge—that magnificent structure—look westward, and you cannot see Blackfriars Bridge or Cannon Street, because Southwark is stuck behind. It does seem to me that we ought not to have four bridges in about 800 yards of river frontage, when, if the City Corporation took the architects and artists and engineers into their secret, we might have one of the most magnificent bridges called the St. Paul's Bridge—a 100- or 120-foot bridge rather on the lines of the Pont Alexandre III. at Paris, with three graceful, beautiful arches, and a low parapet; and this could be done for a sum which would not be much more than the Bridge House Estate would yield. My suggestion to the City Corporation is: Do not be offended because the London County Council cannot agree with you as to the plan or as to the contribution. May I say to both of them—they are near enough to be neighbours: they ought to be decent enough to be friends? (Applause.) If they come together and bring forward a bold scheme which the artistic temperament and the architectural skill of this city can approve, I am sure that the difference between their present plan and what ought to be done will be willingly sanctioned by the ratepayers both of the city and county of London, who ought to contribute to such a work in the handsomest and most generous way. I make that suggestion with a further hint—that if they will ask the Lord Mayor and the Chairman of the London County Council and the officers of both bodies to come to the Local Government Board, I will see that there is a room large enough to contain them, and I will take good care to lock them in, and if I can get a decision in the right direction before they separate, I am sure you will be grateful, and that a hundred years hence London will bless such a decision come to through the friendly co-operation of two great public bodies.

Now, of the Town Planning Conference I have to say this: It has been a brilliant success. It was your suggestion to me, Mr. President, that lots of housing reformers and town planners would say: "At a Town Planning Conference you will be expected to talk about your Bill." Certainly not. This is an International Congress; this is a representative Congress, where broad ideas ought to be interchanged, and on the broadest lines. I did my best to take a hill-top view—if you like, a Mount Pisgah view—and with a name like mine I had more or less to point out poetically the promised land across the river. I know I disappointed some housing reformers and some town planners by not responding to their wish. But this I have to say as an apology, not as an excuse. If any architect or housing reformer or

town planner wants to deal with any detail in the Act or the Regulations, let him come down to the Local Government Board and talk over these interesting but relatively unimportant details with me, and we will see if we cannot straighten the crooked path of the housing reformer and the town planner. But your Conference—general, international, representative—had a right to be treated in a broad and general way. My last sentence is this: We have on Westminster Bridge a statue of Boadicea on one side, and I am going to make this suggestion: There is a pedestal on the other side waiting for another statue; why not have another lady—a modern lady, Florence Nightingale—on the other pedestal opposite St. Thomas's Hospital, where every nurse and doctor could see the statue of such a benign figure as she was, and where every one of the soldiers of the Guards going to the barracks, to Waterloo, and to Aldershot would be able to look at the statue of a distinguished figure to whom the soldiers owe so much? It would blend beautifully with the fine County Hall which is now rearing itself on the Surrey side, and which we sincerely hope will be as beautiful in final execution as the designs showed themselves to be when they were presented to us some three years ago.

In conclusion, Mr. Stokes, I have had a happy week. I have been with you every day. I have enjoyed your company very much. I hope to be with you until the conclusion of the proceedings on Saturday next; and, so far as I can speak for my colleagues, especially the Prime Minister, Lord Crewe, and Lord Beauchamp, who in the House of Lords helped with the Housing and Town Planning Bill, I can assure you as architects that you are appealing to sympathetic ears and hearts and minds, and that everything that can be done to improve housing and to develop town planning on bold and original, even if on costly, lines will be done by the Department over which I have the honour to be chief.

In conclusion, I thank you for allowing me to propose the toast of "The Royal Institute of British Architects." We cannot do without you; but for you we should be cave-dwellers and troglodytes. You have made our streets more pleasant than they would have been without you. You are giving increasingly of your time to the improvement of the character and the attractiveness of the humblest homes by virtue of your skill and craftsmanship; and on behalf of the great community whom I have the honour to represent, we thank you for your ancient past, your beneficial present, and your most hopeful future, which I believe is assured if every three or four years you have fine conferences and exhibitions like that which you have given to London this week.

The PRESIDENT: I know this assembly will sympathise with me in my difficulty in following a great speaker like Mr. Burns. As I said at the Guildhall, it is Mr. Burns who has made this Conference possible, and I should like to add that it is Mr. Burns who has made it a success. His speech at the Guildhall and his speech again to-night have been most invigorating and inspiring. We have several distinguished speakers to follow, and I will not detain you; but I should like to say a word on a point that Mr. Burns touched upon. He has been good enough to mention me as having done a great deal for this Conference. That is perhaps the one mistake he made in his speech. I ought to tell you that the thanks of all present and of all the members of the Conference are in the first place due to Mr. Simpson—(loud and prolonged applause)—for the enormous amount of time and trouble and thought he has given to this matter. After Mr. Simpson comes Mr. Raymond Unwin, on whose shoulders has fallen almost entirely the labour of getting together the Exhibition at Burlington House which is such a distinguished success. I should like also to acknowledge the very great debt we owe to the Royal Academy for lending us their Galleries. I thank Mr. Burns very heartily on your behalf for the kind way in which he has proposed this toast.

The Right Hon. Lord REDESDALE, G.C.V.O.: The toast which I have to give you to-night is that of "Art, Literature, and Science." Your President warned me when he asked me to propose this toast that I should be brief. It was a wise and salutary warning, for I shudder to think of the platitudes and commonplaces I might otherwise have showered upon you. There is, however, one thing that you will perhaps allow me to do, and that is to congratulate you upon the success of the brilliant Exhibition which we have witnessed this week at the Galleries of Burlington House. I do not think that in the whole course of a long life I have ever attended any show which was more pregnant in every sense of the word than that Exhibition. It has been a revelation to many people. I was there yesterday, spending a long and very interesting morning. There were a great number of foreigners present, and it was most satisfactory to notice that every one of them was enthusiastic in praise of it, that they were enjoying it to the very fullest of their powers. It is well, Gentlemen, that you should honour art, for you are indeed yourselves artists, and sometimes I think that the form of art which you have adopted is the one that is the most beneficent of all to the rest of mankind. It is only within a comparatively few years that the world has realised to the full the civilising and educational power of exhibitions of works of the finest art. We all admit this, and I think nobody admits it more than the class to which for so many centuries such exhibitions were all but closed, but who now flock to them as a relief from the rest of their sombre lives. It must be a great boon to a man who has spent six hard days in the horrors of the London slums, with their

dirt, their miasma, their miserable surroundings, to find himself in a gallery surrounded by works of the world's greatest artists. Evidently the mechanic can refresh his mind in that way as he can in no other. But there is a terrible price to be paid for it. I often think that the going back to such a home as his must accentuate his miseries tenfold in contrast with the enjoyment of the previous few hours. This is where the architect steps in. He proposes that there shall no longer be these violent contrasts. Your great Exhibition of this week must bear fruit, for we have, in the presence here of some of the greatest talents that the United States and the rest of the world have brought forth, an earnest that your work will not remain barren. Your object is that when a man goes home from his work or from his enjoyment he shall go home to something which is healthy, which is clean, which is, as far as it may be, attractive, and which will no longer make him look back with regret upon the happy hours he has spent in the fields or in some great gallery. To sweep away the slums; to sweep away all the iniquities by which these men's lives are surrounded; to sweep away the poisonous atmosphere of the dens of infamy which are hotbeds of vice, disease, and crime, and give men something to raise them to the proper dignity they should occupy in the world, and make them better citizens, better men, and of greater credit to mankind. Those are the objects you have at heart. The older amongst us may not live to see the days when your hopes will be realised, but I believe they will be realised. It is impossible to look upon the models shown this week at Burlington House without feeling that there are many thoughtful minds, many poetical minds, many artistic minds which are at work upon this great subject, and that you are determined that, although at the present moment it may be possible for a man to spend a few brief hours enjoying the poetry of life among the works of the greatest masters, in the coming day he shall not be sent back to the prose of its deepest degradation. I have been privileged to couple with the toast of "Art" the name of my old friend, Sir Lawrence Alma-Tadema. For more years than he or I would care to recollect—for we are contemporaries—has his busy brush charmed the world of England as it had already charmed that of his own native country—and who is more worthy of being honoured by you architects than Sir Lawrence Alma-Tadema? What great painter has there been in the past, what great painter is there in the present, who has been so entirely in sympathy with the architectural arts as himself? Certainly there has been no man since the world began who has been more capable of rendering, at any rate one of, the great materials which you use in the adornment of your buildings than Sir Lawrence Alma-Tadema, for he is the prince of the painters of classical architecture. With the toast of "Literature" I am permitted to couple the name of another old friend of mine, a gentleman whose name is well known all over the world as one of the most learned chiefs of the great British Museum that there is no need for me to sing his praises. The only doubt I had in my mind was which of the three great subjects that I have to bring before you I should connect his name with. Should it be Art? should it be Literature? should it be Science?—for he is equally known in all three. I therefore couple with "Literature" the name of Mr. Sidney Colvin, and with "Science" I would couple the name of Professor Dr. Rud. Eberstadt.

Sir Lawrence Alma-Tadema, O.M., R.A.: I had thought that when I was to answer to this toast I was merely to speak of the art of painting. But I understand the toast is more general, and that I have to answer for the three graces—the triplets of taste: for architecture, sculpture, and painting are so nearly related that they must be indeed sisters—or, if it were possible, more than sisters. As a painter, I am accustomed to see pictures everywhere, and it was a great pleasure to me last Monday to hear the right honourable gentleman our Honorary President say that in his earlier days his feelings were stirred and he felt the happier for having to pass so close to the beauties of the Houses of Parliament and Westminster Abbey every day, and he made me really envious when he told us that he used to have his breakfast and his dinner in the cloisters, in the shadows of the Abbey, that wonderful building. Those words of his reminded me that the plastic arts are the most beautiful and the most helpful, and I am glad to see that so much is being done in our days for plastic development in education. Literature with all its beauties cannot produce a clear picture in the mind of the form or colour of a thing which has never been seen before, but the plastic arts speak a language which is universal. Art is understood by the black and the yellow and the white man—by every nation in the world; and every nation in the world expresses itself in art, for without art civilisation could be nothing. Art is the great mother, the great charm of life. Nothing exists without art, and the more we can do for the education of the people through the plastic arts the better it will be for the nations. Therefore, we have had a Congress of architects and town planners, and I am sure they will not forget the painters and sculptors who decorate the walls of our public buildings and schools.

Mr. Sidney Colvin, D.Litt.Oxon., responding for "Literature": Town planning, I take it, is the main point and central interest of your present anniversary meeting. Now it so happens that the great institution of Literature, Art, and Archæology which I have the honour to serve is at this moment specially interested in a question of town planning

at its doors. A distinguished member of your Institute, not here to-night, has designed a new addition to our building on the north side, which, in the eyes of all competent judges, is, I think, a credit to your profession and a great and dignified ornament to the quarter of London where the Museum stands. In connection with this new building, a great London landlord and neighbour of ours, the Duke of Bedford, has carried out on his own account a very remarkable piece of town planning. He has swept away a number of streets and terraces north of our new façade, and has disclosed a fine view towards it, down a broad new avenue opening out into a crescent. And, dare I add, that, while gratefully admiring this bold new improvement of our quarter, of which we as yet know only the ground plan, we are not quite free from misgivings as to what the design of the buildings to be erected on it may be, and dare I express the hope that they will at least be in harmony with the refined Georgian traditions of the district, and not include such exotic experiments as we have lately seen changing the character of a neighbouring square ! Turning to the special art for which I am called upon to answer, the art of literature, I was surprised to-day when a friend to whom I mentioned my engagement for this evening asked "What has literature to do with town planning ?" Why, the answer is, literature has to do with everything. There is no activity, or pursuit, no business or pleasure, no occupation or ambition of man, with which literature has not the power, and may not have the call, to deal.

Least of all need it stand aloof from a pursuit so vitally concerned both with the health and welfare of multitudes and the contentment and refinement of individual lives as the pursuit of town planning. Think, gentlemen, how vast a difference it would have made in the aspect of our country, and the happiness of our people, if, instead of taking up this pursuit in earnest only now, we had taken it up with deliberation and foresight fifty, sixty, or maybe a hundred years ago.

The nineteenth century, as a previous speaker said, has been an age of nothing so much as of urban concentration—of the massing together of vast multitudes of our population in towns. I am afraid the word should rather be urban coagulation, for it has taken place for the most part without plan, without system, without forethought, and consequently without regard to conditions of health, of beauty, of cleanliness, or of order. We have seen towns spreading with the swiftness of a plague or a fire, and with results almost as disastrous both to the face of Nature and to the lives of populations. How different might all this be if we were able to start fresh ! Gentlemen, you begin late. Your efforts for the future must need be greatly hampered and discouraged by all that has been misdone in the past. But literature will look forward to your efforts, and found on them great hopes for mankind and fine achievements to praise and celebrate. Not that literature has all to gain by the abolition of filth and squalor and the festering degradation of slums and of human existence as it often is under present town conditions. Literature has two ways of looking at these things. Looking at them in one way, you find a Ruskin or a Morris lamenting and denouncing the defilement of ancient beauty and the disturbance of familiar scenes of verdure and of peace. Or you may remember the words of Matthew Arnold, looking down on Oxford from the Berkshire hills :—

> "And that sweet city with her dreaming spires,
> She needs not June for beauty's heightening,
> Lovely all time she lies, lovely to-night."

You may remember these lines and wonder whether the poet could have written them now if there had come into his view the new, mean, straggling suburbs stretching over the fields from his beloved city. But, looking at these matters from another point of view, literature, like the other fine arts, knows how to extract beauty, or if not beauty, at least effects of power and of imaginative appeal, from things in themselves hideous or squalid or distressing. Thinking only of our own most recent literature, I remember a marvellous effect of London slum squalor in winter, heightened to horror by the action that passes there, in Mr. de Morgan's novel of *It can never happen again*. Or do you think that Mr. Arnold Bennett could have got so vivid and biting an effect in telling all the small events in the daily domestic lives spent in the Staffordshire five towns if he had not for background the grimy chaos of those towns themselves—such a chaos as you town planners would never have dreamed of allowing and now long to sweep away ? But, gentlemen, literature, alas ! will have long enough to wait before aspects of this kind disappear from the face of England. Neither, if the time for their disappearance ever comes, will literature too much lament their passing, but will turn her thoughts to the celebration of happier, sunnier, better ordered lives, and will love to celebrate the victories of those who labour to such an end. In the meantime, she thanks you in my unworthy name for the manner in which this toast has been proposed by Lord Redesdale and welcomed by this company.

Professor Dr. RUD. EBERSTADT responded for "Science," but was too indistinctly heard to be reported.

Sir ASTON WEBB, C.B., R.A.: I have the great privilege of proposing to-night the toast of "Our Guests." You will all agree with me that without our guests we should have had no Conference here in London ; and without our guests we should have had no Exhibition, for they are largely the exhibitors in that Exhibition which has been so kindly spoken of to-night. It is no exaggeration of language to say that our guests have come from

all over the world, from north and south, from east and west, and they have come bringing their sheaves with them, sheaves of plans which you will see at the Royal Academy, and sheaves of Papers which we have been delighted to hear read at the Galleries day by day. What they bring to us is an instruction and delight, and though Mr. Burns does not seem to recommend modesty to us, we cannot so quickly throw off that quality which up to now we have rather been pleased to possess, and we gladly say that our guests have a very great deal to teach us in this matter of town planning. We are afraid that we may not have as much to show them as they have to show us. But what we can say is that all we have they shall see, that what we lack in that way we hope to make up for by a hearty welcome to them all. We are very proud to see them here. We thank them very much for coming, and we understand very fully the great personal trouble that it must have been to many of them to be here with us to-night. France and Germany are largely represented here, and in our Exhibition we have M. Bonnier and M. Bayard; we have Dr. Eberstadt, whom we had the pleasure of listening to just now; we have Dr. Stübben and Dr. March. From Italy I can only mention one or two names: we have Cav. Ing. M. Rondini and Cav. Ing. Rodolfo R. Bonfiglietti; from Belgium we have Monsieur J. Schobbens, Dr. P. de Heem, Monsieur F. Van Kuijck, and Monsieur M. Lemeunier; from America we have Mr. Edward Kent, who is representing the American Institute of Architects, and we have Mr. Daniel H. Burnham, who has sent us a magnificent series of drawings which are an education to all of us. From Australia we have Sir George Reid. He is in the delightful position of representing a country which is actually going to produce a brand-new capital quite from the beginning, and we town planners are looking forward with the greatest interest to see what Australia will produce in the way of a capital. We have from Canada Mr. Baker, the Secretary of the Ontario Association of Architects, who, as we all know, have an almost unlimited opportunity of town planning which we in England envy greatly, for in all our efforts we must necessarily be very much guided and bound by what exists. It is quite certain, however, from one of the Papers we heard to-day that the town planners of England do not intend to wipe away or sweep out all the ancient monuments that we have nor the natural beauties which at present exist. The object of our town plans will be, I am quite sure, to preserve these, and, as Professor Baldwin Brown has said, to make them centres of attraction in the plans which are produced. We have also a representative from New Zealand, and almost every other country. Coming nearer home we have our Honorary President, the President of the Local Government Board, to whom it is impossible for us to express fully our thanks. We have the Secretary of the Board of Education, Sir Robert Morant, and we certainly feel that the Board of Education will take an interest in this matter, for, as Mr. Burns has told us, architecture is one of the great educational instruments. We have the Office of Works represented by the Hon. Sir Schomberg McDonnell, and the Office of Works is largely interested in all these matters. We have Lord Redesdale, who at one time himself adorned the same post. Then we have many members of the Royal Academy, to whom we owe our grateful thanks, for were it not for them we should not have been able to have this Exhibition. We have the Keeper of the Royal Academy, to whom we all owe much, and the Secretary, to whom we owe more than we can say: he has been helpful to us from the very commencement, as Mr. Raymond Unwin will testify. We have nearly all the towns of England and Scotland represented; but I would especially mention Edinburgh, for we have the Lord Provost amongst us, and those who have been to our Exhibition will be interested in those delightful plans of Edinburgh which have been so well arranged by Professor Geddes. But, gentlemen, as you will wish to hear our guests rather than me I will say nothing more, except to couple with this toast the name of M. Louis Bonnier, to whom we owe the plans of Paris which occupy one of our rooms and which are of absorbing interest to all who have time to study them. I also propose to couple with the toast Mr. Burnham, and in saying that I would like to acknowledge the courtesy of the President of the United States, who at the request of Mr. Whitelaw Reid was good enough to allow us to have the Washington drawings which are one of the great beauties of our Exhibition. I will also call upon Mr. Leslie Vigers to respond. He is the distinguished President of the Surveyors' Institution, another body which is largely interested in town planning.

Mr. Daniel H. Burnham (Chicago): I deeply appreciate the honour of responding to the toast so eloquently proposed by the distinguished gentleman who has just taken his seat. I presume that this honour is not conferred upon me personally, but because I am an American, and my country may be said to represent the cosmopolitan blood of other nations; so that in a sense my response is intended undoubtedly to be that of Germany, of Italy, and of many other nations, all of whom are of us as they are at home. The history of the present movement of town planning is very short: it goes back less than ten years. Of course preceding that there had been town planning epochs: principally that in France, followed by those in Austria and Italy; but that of to-day is not more than ten years old. During the last ten years there has been manifested, at first fitfully here and there, but soon more constantly over large sections

of the civilised world, an intense interest in town planning. The work, however, up to the present time has been done in a disjointed manner, because the best that any one nation can do for itself cannot be equal to that done by them all working together and interchanging their ideas; and those who have been the most deeply engaged in this work, and most earnest in the prosecution of it, have constantly felt that they need a sort of university which they may attend; and it does not surprise us that London has become such a university. England may be slow—she is as compared with us in alertness, in quickness to take hold—but we all know the old story that when she does it is like the roar of a lion, the rest of the voices in the forest are no longer heard. So we come to London as guests; and what do you offer us? Food and wine, flowers, the faces of fair women and noble men. You throw open to us all that you can think of that might interest us—and you have interested us. But you do much more than that. Your hospitality is of the kind which affords the greatest opportunity that could now fall to the lot of those who are interested in the study of town planning—the opportunity to meet and to see the best work of others. You have that work in magnificent rooms, and I must say here, most superbly hung and arranged, and now we can look into each other's eyes, and we can hear each other's voices, and we can get the true meaning of the other man's thought. This enriches us beyond measure. No man can go away from this Conference without carrying sheaves more valuable than those he brought. He will go home with humility—the necessary foundation for an artist; his work will be more humbly done, perhaps, but there will be more power to realise his purpose. It is an occasion where we are guests in an epoch. What is happening here is no light matter. Men have been struggling towards this point since the dawn of history. All history is filled with preluding attempts here and there—of Nero, of Constantine, of Augustus, of Pericles, of Louis Napoleon, all having some effect locally and for a time, but then passing away. That is not the case now. Men have come shoulder to shoulder up to a certain level, and now stand on a certain platform of human advancement never before reached, and they are not going to recede. This city planning means something far deeper than the mere shaping of streets. It means that men have come to realise a universal thought. This town planning has spread all over the world. In America there are hundreds of city planning commissions, in Germany there are hundreds of them—I have been told there are two thousand. We hear of them in Japan, in Australia. The idea has become universal, and it is not possible to think of it as an ephemeral thing; it means that the nations have come together in a line up to a certain stage of advancement. I thank you very much in the name of the guests for this great opportunity. I feel that when we come to leave our work to our surrogate, or speak to our sons perhaps for the last time, many of us will say, "The proudest moment of my life was in London at the Town Planning Conference of the Royal Institute of British Architects." (Applause.)

M. Louis Bonnier: Mesdames et Messieurs, je ne sais pourquoi mon ami Simpson, notre aimable secrétaire-général, qui parle admirablement le français, désire que ce soit moi qui vous lise deux télégrammes qu'il vient de recevoir de France. Je pense que c'est parce que, aussi modeste qu'aimable, il veut bien être à la peine, mais ne tient pas à être à l'honneur.

Voici ces télégrammes:

"Stokes, Président l'Institut Royal des Architectes Britanniques, Hôtel Cecil, Londres.—Regrettant ne pouvoir assister banquet ce soir. Envois pour vous et collègues expression vive sympathie et compliments.—Dausset, ancien Président Conseil Municipal."

L'autre, portant les mêmes vœux, émane de Charles Normand, le Président-fondateur de la Société des Amis des Monuments parisiens:

"Président Town Planning Conference, Hôtel Cecil, Londres.—Prevenu trop tard. Mille regrets.—Président Monuments parisiens, Charles Normand."

Mesdames et Messieurs, je suis particulièrement honoré d'avoir été désigné pour exprimer à nos hôtes toute notre reconnaissance pour le très cordial accueil qu'ils nous ont fait pendant cette semaine. Si nous sommes venus, si nombreux, de tous les coins du monde, répondre à votre appel, c'est que nous connaissions depuis longtemps la large hospitalité anglaise et, plus encore, la manière aimable dont le Comité des Dames sait donner à vos réceptions un caractère familial et nous rappeler un instant nos foyers lointains. C'est aussi que, chez toutes les nations civilisées, on a senti la nécessité d'une culture attentive du bien-être pour l'individu, pour la maison, pour la ville, pour le pays lui-même. Le Royal Institute of British Architects a compris, à son tour, qu'il y avait mieux à faire encore, que ces tendances dispersées avaient besoin, pour leur développement propre, de groupement, de comparaison, de critique, d'émulation. Ce sera son honneur d'avoir réalisé brillamment cette excellente œuvre sociale. Grâce à vous, nous retournons dans nos foyers avec une ardeur nouvelle, pleins d'idées, ayant recueilli à Londres des faits probants, des idées fécondes, des formules heureuses, comme celle de Monsieur le Président du Local Government Board, John Burns, montrant la force et la beauté des organisations justes, laborieuses et pacifiques, et réclamant "le citoyen simple dans la cité magnifique." Et, élargissant, à mon tour, une formule que vous connaissez, laissez-moi croire fermement

que, dans cette compétition nouvelle pour la santé physique et morale des foules, "Every man will do his duty." Je bois à l'Institut Royal des Architectes Britanniques et à son très honoré Président.

Mr. Leslie Vigers (President of the Surveyors' Institution): It gives me very great pleasure to respond to the toast of "The Guests" on behalf of the sister institution which I represent. The members of your Institute and mine are very closely associated. Many of us are members of both institutions. Members of your Institute are at times grateful for the assistance of members of my Institute, and we, as members of the Surveyors' Institution, offer our hearty congratulations to you upon the success of this great Conference. Our Institution is much interested in the question of planning of towns, and we look forward to the great success of the Town Planning Act in many cases. Personally, I now look forward to being able to develop a large tract of land which has been held up for the last three years owing to disagreement between various authorities, but I hope in the near future, with the assistance of the right honourable gentleman the President of the Local Government Board, to be able to persuade these local authorities to accept a plan for laying out the estate, a result which at present we have been unable to attain.

The guests separated at about 11.15.

St. Paul's Bridge.

The Times of the 19th inst. published the following letter, addressed to its Editor, from Mr. Leonard Stokes, President of the Institute:—

Sir,—Will you allow me, as President of the Royal Institute of British Architects, to correct publicly a rather serious error which occurs in the report of the Bridge House Estate Committee that you published on the 14th inst.?

The report says that a deputation from my Institute "suggested that for æsthetic and architectural reasons they (the Committee) should consider the advisability of adopting the line for the suggested new bridge to come out opposite the south door of the central transept of St. Paul's Cathedral, and, further, that the best architectural advice should be employed in connexion with the scheme." Now, as all the first part of this statement is incorrect, it follows that the further statement as to the inferiority of this scheme and its great extra cost cannot refer to any scheme proposed by the deputation, which carefully confined itself to urging upon the Committee the desirability of obtaining the best architectural advice before any scheme was decided upon—a highly reasonable, proper, and obvious suggestion, which, however, I regret to say has not been adopted. Members of the Royal Institute of British Architects may have made suggested improvements upon the very crude scheme proposed by the Committee; but all the deputation from the Institute could do with propriety was to impress upon the City authorities the importance of the proper consideration of the subject from the first; and this they did, and nothing else. But their advice has unfortunately been ignored, with the result that a very indifferent lay-out of the approaches has been put forward by the Committee for adoption by the Corporation and the sanction of Parliament to carry out the work; and then, unless members of Parliament have nobler views than those of the City Corporation, the die will be cast and no amount of "artistic embellishment"—the City man's idea of architecture—will ever save the scheme from failure. Was St. Paul's Cathedral designed in this fashion, and are not the hundreds of other fine buildings in London evidence enough, without going further afield, that architecture when properly handled can produce the noblest monuments the hand of man is capable of?

The same questions might also be very properly asked with regard to the King Edward Memorial for London, the Executive Committee for which seems to consist of representatives of all possible interests except architecture, the one which enters perhaps more largely than any other into the very numerous suggestions already made for this Memorial!—Yours faithfully,

Leonard Stokes, P.R.I.B.A.

The London Memorial to King Edward.

Since the above letter appeared, Mr. Leonard Stokes has been appointed a member of the executive committee of the London memorial to the late King Edward. The other members are: Lord Strathcona, Earl Cadogan, Lord Rothschild, Lord Desborough, the Earl of Plymouth, Lord Blyth, Lord Redesdale, Mr. Balfour, M.P., Sir Edward Poynter, P.R.A., the Hon. Sir Schomberg McDonnell, the Hon. Harry Lawson, M.P., Chairman of the Stock Exchange, Sir George Faudel-Phillips, Chairman of the London County Council, General Sir Dighton Probyn, Mr. Hayes Fisher, M.P., Chairman of the Baltic, Sir Joseph Savory, Mr. Butlin, the Lord Mayor, Mr. Alderman and Sheriff Johnston, Mr. Sheriff Buckingham, Lord Farquhar, Earl Carrington, Lord Claud Hamilton, M.P., Lord Revelstoke, Lord Avebury, Lord Knollys, Mr. Lewis Harcourt, M.P., Sir J. Stirling-Maxwell, Sir Frederick Banbury, M.P., Mayor of Westminster, Governor of the Bank of England, Mr. Sydney Buxton, M.P., Master of the Mercers' Company, Master of the Grocers' Company, Mr. S. Hope Morley, Sir Richard Stapley, Chairman of Lloyd's, Mr. Deputy Matthew Wallace, Sir Thomas Barlow, and the Lord Mayor-Elect.

Sessional Programme, 1910 11.

Subjoined is the programme for the Meetings of the Royal Institute during the forthcoming Session. The meetings begin at 8 except where otherwise stated.

Nov. 7.—President's Opening Address, at 8.30.
Nov. 8.—Conversazione, at 9.
Nov. 21.—Business Meeting.
Dec. 5.—"Pierre Lescot and Jean Goujon," by Reginald Blomfield, A.R.A. [*F.*].
Dec. 19.—Business Meeting.
Jan. 2, 1911.—"The New General Post Office," by Sir Henry Tanner, I.S.O. [*F.*].—Award of Prizes and Studentships.

Jan. 16.—"Cardinal Medicis' Pleasure House," by Halsey Ricardo [*F.*].
Jan. 30.—President's Address to Students, Presentation of Prizes.
Feb. 13.—"The Artistic Development of London," by Paul Waterhouse, M.A.Oxon. [*F.*], John W. Simpson [*F.*], and E. A. Rickards [*F.*].
Feb. 27.—Special and Business Meetings.—Election of Royal Gold Medallist.
March 13.—"Burlington-Devonshire Collection of Drawings," by J. Alfred Gotch, F.S.A. [*F.*].
March 27.—Business Meeting.
April 10.—"Coloured Relief as Decoration," by R. Anning Bell.
May 1.—Annual General Meeting.
May 22.—"The New York Public Library," by J. M. Carrère.
June 12.—Business and Ordinary Meetings.—"Egyptian Architecture," by Ernest Richmond, *Licentiate*.
June 26.—Presentation of the Royal Gold Medal, at 8.30.

University of London: Mr. Wm. Dunn's Lectures.

Some recognition of the part taken by architects in scientific work is shown by the Board of Studies in Engineering Science of the University of London, who have invited Mr. Wm. Dunn [*F.*] to deliver a course of Lectures in the Department of Advanced Engineering on the subject of Reinforced Concrete. The lectures will be given at the Institution of Civil Engineers, Great George Street, Westminster, at 5.45 on Fridays November 4th, 11th, 18th, 25th, and Wednesday November 30th, 1910. The chair at the inaugural lecture will be taken by Sir Henry Tanner, I.S.O. [*F.*]. The lectures will deal with patents; concrete for various purposes; columns and compression members; longitudinal reinforcement; lateral reinforcement in various forms; column footings and other details; beams and reinforcement to resist bending; labour-saving tables; shearing and shearing reinforcement; retaining walls; dock walls and jetties; bridges; girder bridges; arch bridges; failures in reinforced concrete; quantities and cost data, &c. In addition to the lectures, a demonstration will be given at University College, showing the manner of failure of reinforced concrete columns and beams in the testing machines. The lectures are addressed to advanced students of the University and others interested in the subject dealt with. Admission is free by ticket obtainable on application to Mr. P. J. Hartog, the Academic Registrar.

The Concrete Institute.

The Council of the Concrete Institute, with the object of encouraging the contributions of useful Papers on the materials employed in and the applications of concrete, in either the general or the special aspects of the subject, have decided to award a medal annually for the Paper which they consider to be of the greatest merit in each session. Communications should be addressed to the Secretary of the Concrete Institute, 8 Waterloo Place, Pall Mall, S.W.

The New County Hall.

The Establishment Committee of the London County Council have had before them a suggestion of Mr. Sidney R. James Smith [*F.*], that students should be afforded facilities for watching the progress of the work of building the new County Hall. Mr. Smith asks us to mention that he has received a reply from the Clerk of the Council stating that facilities will be granted, on application, to accredited members of societies and students interested in building construction for viewing the works at convenient times.

Mr. Ashbee's University Extension Lectures.

Mr. C. R. Ashbee, M.A. [*F.*], is delivering at the Morley College for Working Men and Women, Waterloo Road, S.E., a course of University Extension Lectures on "The British Home as it is and as it might be." The course is divided into four parts as follows:—Part I. On the Building of the House; Part II. The Furnishing of the House; Part III. Town Planning; Part IV. On the Greater Aspects of the Question. The lectures are delivered on Thursdays at 8 P.M., and are free to students who have taken out a Sessional Ticket.

British School at Rome.

The Annual Meeting of Subscribers is to be held in the rooms of the Society of Antiquaries, Burlington House, Piccadilly, W., on Tuesday, the 22nd November, at 5 P.M. Sir Rennell Rodd, K.C.M.G., will take the Chair. Illustrated communications will be made dealing with the work of the school, and there will be a display of architectural and other drawings by students of the school.

The late A. H. Tiltman [*F.*].

Mr. Alfred Hessell Tiltman, who died on the 7th July, at the age of fifty-six, was elected an Associate of the Institute in 1879 and a Fellow in 1888. Mr. Tiltman, after serving his articles with Messrs. Jeffery & Skiller, of Hastings, entered the office of Mr. Milford Teulon as improver, and studied in the Architectural School of the Royal Academy. He was afterwards for short periods in the offices respectively of Mr. Benjamin Tabberer and Mr. Henry Shaw, and later with Mr. Rowland Plumbe as managing assistant. He then studied abroad for several months, and on his return entered the office of Mr. E. W. Godwin. In 1878 he started in independent practice at 22 Great James Street, Bedford Row. Among his early commissions were a manor house at Anstey for Henry Hall, Esq., J.P.; the reconstruction of Eggar's Grammar School, Alton; houses at Hastings; baths at Cleethorpe, Lincolnshire; St. Peter's Vicarage, Brockley; St. Clement's, Kensington; All Saints'

Church, Hastings; Holy Trinity Church, Guildford; Greasbrough Church; mission house, church, and schools for the Protestant Italian Mission, London; houses at Oxted, and schools at Horton. In 1901 Mr. Tiltman, as one of the three London, together with the seven Scottish, architects invited to compete, was awarded the second place for his designs for the entire rebuilding of the Royal Infirmary, Glasgow. In 1903 he was one of the twelve architects finally nominated, out of the fifty-six who entered the competition, to send in designs for the Manchester Royal Infirmary. In the same year he won the first premium in the County Higher Grade School, Acton, competition; he was one of the twelve non-local architects chosen two years ago to compete in the Bristol Royal Infirmary improvement and extension scheme. In 1905 he was nominated, with nine others, to submit designs for the Luton Secondary Schools and Technical Institute, and, in last February, one of the five for the Hendon Education Committee's School, Hampstead Garden Suburb. In 1898 he won the second premium for the Battersea Baths and Wash-houses. He was placed first in the competition for the Metropolitan Asylums Board's Grove (Fever) Hospital, Lower Tooting, costing £250,000, opened in August 1899 for 550 patients. He was the architect of the St. Mary, Islington, Public Baths, in Hornsey Road, 1891–2, and for their subsequent enlargement, together with the Women's Swimming Bath; the Baths and Wash-houses in Tibberton Square, 1893–4, constructed at a contract price of nearly £34,000; the Baths and Wash-houses in Caledonian Road and in St. Peter's District, 1891; and, in competition, the Central Electric Lighting Station in Eden Grove, Holloway, with water-tower and other additions, 1894–1901. He designed the Lambeth Public Baths in Kennington Road, built in 1896–7; the Secondary School, Diss, 1908; the Eastern District Hospital, Duke Street, Glasgow; and in conjunction with Mr. J. C. Prestwick he designed and carried out the Leigh Infirmary. Ten years ago Mr. Tiltman was appointed consulting architect and made plans for the Bradford City Council's Central Baths in Mosley Street and the District Baths in Drummond Road, the carrying out of the former being entrusted to the City Architect, Mr. F. E. P. Edwards. In 1902 he was deputed by the Brighton Corporation to prepare schemes for the repair and improvement of the Aquarium, together with new works, and an arcade at the Madeira Road level, to cost some £40,000. In 1899 he made the plans and designs, as joint architect with Mr. W. Cecil Jackson of Chesterfield, for the Central Board Schools in Ashgate and Foljambe Roads, Chesterfield, for 1,200 children, with cookery, laundry and pupil-teachers' centres, swimming baths, &c.; and, jointly with Mr. Herbert W. Chattaway of Coventry, for the Nurses' Home, and for the out-patients', mortuary, laundry, and other departments of the Coventry and Warwickshire Hospital in Stoney Stanton Road, 1906–10. He acted as professional adviser in respect of the selected plans for St. Pancras Public Baths, 1899, and as assessor for the Wandsworth Borough Baths, Clapham, the Princess Alice's Hospital, Eastbourne, extensions, and the Public Baths at Wood Green and Handsworth. Mr. Tiltman contributed to the Transactions of the Institute a Paper on "Public Baths and Wash-houses," read at a General Meeting on the 6th February 1899 [JOURNAL, 11th February 1899].

THE FUTURE OF LONDON.

By T. RAFFLES DAVISON [*Hon. A.*].

WHAT are the chances for a fine architectural development of London in the future? is a question of the first importance to architects at the present moment. Whilst an International Conference on Town Planning holds the public interest, it is pertinent to call serious attention to the present deplorable condition of London from an artistic point of view, and the still more serious outlook for the future.

London is loved by thousands in a way which cannot be realised or understood, perhaps, by the bulk of Englishmen. But as the metropolis of the British Empire its present and future development must appeal powerfully to everybody. There is no reason why it should not be as noble a centre of empire as was Rome—but, if present conditions remain, it never will be.

The Art Committee of the Institute has approached this subject with such careful regard that it has been unable yet to offer any definite recommendations! The Institute would probably, through the medium of its individual members, be glad to formulate definite schemes for the future development of the city both as a whole and in parts, but the initial difficulty to be faced is in regard to the authority which can direct and control any definite schemes. In this country we have not learnt to welcome much official control over the artistic disposition of our buildings, and we need not withhold some sympathy towards those who desire to see individuality encouraged and private enterprise afforded free scope for all reasonable development. But surely in certain parts of a great city the buildings should be subjected to a definite control not only as to frontages and heights, but also as to some general character of design. This is the only way to secure any grandeur and dignity in the important centres and prominent building lines. The first and supreme point is, of course, to obtain a dignified and convenient lay-out so as to insure a proper degree of spaciousness, of light and air, and adequate and convenient lines of traffic. But something beyond this is needed for the finest results, and even the

monotony of a Rue de Rivoli may have its value in the architectural treatment of city buildings.

The first great object, then, which we may well seek to attain is a proper kind and degree of artistic control. And what mainly concerns us now is to ask, Where is that control to come from? We need something more than the control of well-intentioned and cultured men. We need a control representing the best artistic inspiration of the time, aided by a full appreciation of the commercial side of life. In this control we should hope to see the architect lead the way, aided by the sculptor and the painter, the surveyor and the city councillor, but all under the final authority of a Ministry of the Fine Arts. That which is the best way in the opinion of the best artists of the day having been once indicated, it might be left to the culture and good sense of a Minister of Fine Arts to adopt and initiate.

Now, the first thing that the poor ratepayer says is that he is taxed heavily enough and can bear no more. But it cannot be too strongly enforced that great improvements are spread over many years and will often, if well engineered, pay for themselves, whilst some enterprises, like the new St. Paul's Bridge, are carried out without any cost to the ratepayer at all. Take the case of such bridges as those suggested by Mr. Collcutt, with covered ways and buildings, or the proposal to recreate something after the manner of Old London Bridge. Such schemes which offer no serious difficulties in the carrying out would probably pay a good interest on the outlay. A great National Pleasure Garden, such as is suggested for Battersea Park, would probably pay for itself; it would moreover be a good national asset. Fine thoroughfares like those suggested by Mr. Stokes or Mr. Lanchester carry their own reward with them. But the great need of the present time is to secure some authoritative control as to the improvement of London, and to lay the foundation for continuity of action in the coming years which will secure that gradual artistic development that is so desirable.

What can we say as to the present condition of London? Could anything be more to be deplored than the condition of either Trafalgar Square or Piccadilly Circus, whether as regards the practical or the artistic aspect? We have such diagonal lines of traffic as to endanger the safety of foot passengers in either place. In both centres we have diagonal traffic cutting across the other lines of traffic from east to west. In both places the opportunity for a fine architectural treatment is there, and it only needs some general scheme to be adopted by a controlling authority to bring them into existence in a comparatively short time.

It is of little use harking back to lost opportunities, except in so far as they illustrate or suggest the further opportunities which we are losing to-day. A hundred years ago—even fifty years ago—a large and comprehensive scheme for the improvement of London might have been adopted and largely put into execution. The fine Embankment north of the Thames might have been followed by one equally fine on the south side. Some concentration of railway traffic and main line stations might have been obtained. The relation of the Mall to Trafalgar Square, and the linking up of east to west traffic with a good north and south line of roadway, might have been realised. Government offices might have been planned together in one fine building scheme. A great encircling roadway might have been created somewhere from five to ten miles from the centre of London. One great railway depôt for all northern train services would have simplified our travelling and avoided the creation of dismal tracts of derelict houses and lands. London's misfortune is that no definite plan for the inevitable development of a great city was laid down as a safeguard against the haphazard and awkward results we see to-day.

Now it is too late to recover many of the lost chances. But many fine opportunities still exist, and these must also disappear unless some definite effort is made to arrange careful schemes and to provide a controlling authority which will compel their realisation. It should not be hopeless even now to look for a great boulevard and embankment on the southern bank of the Thames right from the new County Hall to London Bridge which might still leave certain rights of wharfage free. It cannot be too late to project one or two great lines of thoroughfare from north to south. There is still a possibility for a great and fine environment to the British Museum. London Bridge approaches at both sides of the river call for fine and adequate treatment. Trafalgar Square presents such chances as few cities in the world can show for a breadth and balanced dignity of effect. Piccadilly Circus, Hyde Park Corner, the Horse Guards Parade, Oxford Circus, Ludgate Circus, the river front beyond the Houses of Parliament, and other parts of the city present opportunities which might go some way to provide a certain amount of dignity and nobility of treatment that no extended and comprehensive plan of improvement can now be looked for to obtain. The time is ripe for action—not to immediately spend millions of pounds, but to lay down some definite schemes which shall gradually be carried out. We have men who can provide such schemes. But we first must find where the authoritative control is to come from. Surely the Royal Institute of British Architects ought to be foremost in the endeavour to secure this provision for the future of London.

May I say one word on the human side of all this? We have seen those sitting in attention at the recent Town Planning Conference who would have been just as competent to take a prominent part in its proceedings as were those selected. It is pleasant to see a mere personal advantage or advertisement subjugated in these matters of large

public interest. I wonder how many visitors noted the drawings of "A Suburban Development of the Town Planning Act" exhibited at the Academy by the Manchester Society of Architects. Here all personality was absolutely sunk, and the scheme simply went forth as the proposal of a public body. It was beautifully set forth, regardless of cost and labour. Is it not encouraging to see much personal effort and hard work sunk entirely in this way?

I am told that if four hundred gentlemen agree solidly and wholeheartedly as to a given project, and carry it forward with ability and zeal, they can do it in the face of millions of their fellow-creatures. When I spoke to Mr. Burnham of Chicago as to what we wanted, he said: "Then why don't you set about and get it?" I venture also to ask why. Even the twenty odd members of the Art Committee of the Royal Institute of British Architects, if absolutely united under the present chairmanship of one to whom the Town Planning Conference owes so much, might just manage to weigh down the long arm of that lever which is needed to open the gates of a future for London.

CONGRESS ON SCHOOL HYGIENE, PARIS, 1910.

THE Congress on School Hygiene and the Exhibition in connection therewith were held at Paris in the early part of August in the Grand Palais des Champs Elysées, a building of great interest to the artist and scientific constructor, and one well suited for Congress work. On the ground floor in separate rooms were exhibits of the different European countries represented at the Congress—France, Germany, Austria, Norway, Sweden and England. These consisted of models, drawings and photographs of school buildings, furniture and fittings, playing grounds, gymnasia, &c., while there were many types of seats and desks indicative of the great importance attached to these by medical men from the hygienic point of view. There was also a display of sanitary fittings, though not of the best type or worthy of special note.

Many of the countries had illustrated books of their respective schools. These were well and artistically produced, but their value in many cases would have been greatly enhanced if more plans and sections had been given, and if the cardinal points had been indicated where plans were given. One of these we found specially interesting—"Nouvelles Constructions Scolaires et Service Médical Scolaire de la Ville de Berndorf (Basse-Autriche)." It contained coloured illustrations of the decoration of the class rooms in the girls' school, each room being in a different style—Egyptian, Pompeian, Roman, Gothic, Moorish, Byzantine, Rococo, Baroque, &c. The intention of the designer is best indicated by the words of Prof. A. Wieser: "d'éveiller et de provoquer le sentiment du beau, de stimuler de façon pénétrante l'intelligence pour la beauté de la forme artistique et de la couleur, et de remplir ainsi plus complétement la vie de ces enfants destinés à devenir par la suite des hommes et des femmes."

The opening meeting of the Congress was held in the large emphitheatre of the Sorbonne, under the presidency of the Minister of Instruction. The proceedings began with "The Marseillaise," played by a military band, after which came the inaugural address by M. le Dr. Albert Mathieu. This was followed by speeches by representatives from all over the world. Sir Lauder Brunton spoke for England, Sir James Grant, the Canadian representative, spoke in English, and his eloquent speech was much applauded.

A reception was given to delegates by the President of the Congress at the Palais d'Orsay; a musical and theatrical soirée at the Salle Gaveau; a reception at the Pasteur Institute, with a most interesting cinematographic illustration of the progress of sleeping sickness and intermittent fever in the blood. There were also other lighter entertainments all organised with that charm which the French hosts at all times display.

The actual business of the Congress was conducted at the Sessional Meetings in the Salons on the first floor of the Grand Palais. The proceedings were in German, French, and English. The papers and other contributions by specialists were printed in these languages, but as the papers numbered nearly 300, covering 1,250 pages of print, it is impossible to describe them.

There were a few papers, of which we shall speak later on, but not much discussion on school buildings, the chief interest being directed to other branches of the very wide subject comprised in the term "School Hygiene." It would be impracticable to deal with these in this report, but it may be safely said that every phase of physical and mental treatment of children of all ages, classes and conditions, in and out of school, was exhaustively considered. The subjects ranged from the training of very young children to the training of teachers in hygienic science and methods, teaching the deaf and dumb, the afflicted and feeble-minded, the prevention and treatment of disease, the hygienic shapes of desks and seats.

One paper by Dr. Shelley, the consulting medical officer of Haileybury College, on "the best hygienic arrangement for boarding schools" contains a fund of information for architects. The standard set is high, and the architect will of course use his judgment and experience to adapt any particular design to the conditions and circumstances in which he is working, without being bound to hard and fast rules. He will, however, appreciate the hints on planning, the importance of sunny aspects, and of protection from flanking

winds; heating and ventilation—and in this connection the necessity of retaining the energising properties in fresh air which are destroyed by plenum systems—and many other matters vital to school boys and girls are dealt with.

Other authors expatiate on the value of fresh air. Professor Thomas B. Balliet, of New York University, referring to the plenum system, writes that under this system "the stimulating effect of cool out-door air admitted through windows is never felt in the school room. The teachers of America as a class have never agreed with the experts in ventilation on this matter, and have always protested against keeping windows closed."

Other papers by German, French, and English writers dealt with open-air schools. These were originally tried for tuberculous children; but the success attending them has led many to advocate the extension of the principle for all kinds of children, thus emphasising the fact that the nearer the atmosphere of a school approximates to the open air the better for children, and that the washing and de-energising of air by artificial means, like the plenum system, to the exclusion of fresh air through open windows is an evil tending to lower the vitality of all and positively dangerous to weak children.

Visits were paid to the following schools in Paris, viz.: The Lycée Molière, École Ch. Baudelaire, École Boule, École de Plein Air de S. Mandé, Lycée Montaigne, École Coloniale, École Lavoisier, Écoles de Pré-Saint Gervais and Lycée Buffon.

As an example we may mention one of the Lycées for over 1,000 boys. Its class rooms are built round a double quadrangle, and are entered from cloisters or open corridors on two floors. The rooms are about 18 feet high and about 20 feet of floor space is given to each scholar. They are too large and too high. Many of the windows have ground glass, and the general effect is gloomy. There are very large art and science rooms well lighted from the roof. Instead of side windows, the openings are filled with wooden hoppers which fall in to admit air without the ill effect of cross light.

The Lycée Montaigne is a boarding school somewhat similar in plan but with many superior features.

L'École Ch. Baudelaire is a corridor school for girls with bright, cheerful rooms of reasonable dimensions, good staircases, small, well-appointed rooms for cooking and needlework, an art room, large dining room, but no other assembly hall.

L'École Boule is an immense establishment for "l'application des Arts and des Sciences aux Industries de Mobilier" divided into two sections, one relating to furniture, the other to metal.

With one exception the school buildings we saw are well kept and airy, with wide, well-lighted stairs, the dormitories are good, the corridors wide, and the artificial lighting well distributed. The weak points are: little or no provision for fresh air to enter when windows are closed, inadequate exits for foul air, not sufficient attention to aspect for class rooms. In some cases the sites are in noisy situations.

In the boarding schools the accommodation for bathing is insufficient, and the sanitary fittings mostly unsuitable and antiquated.

Of the other foreign schools, of which many plans were shown in the exhibition, some of the Swedish and Polish schools were very good—corridor schools with well lighted class-rooms, but too frequently aspect was not sufficiently considered.

In conclusion, we felt that on the whole the Exhibition was smaller and less interesting than that held three years ago when the Congress met in London. The papers, however, were exhaustive and full of enthusiasm. It is evident that all nations are realising their responsibilities to children, to the production of *mens sana in corpore sano*. The era is established of healthy, airy, and bright schools, of simple and appropriate design, adapted to the varying methods of training the young. School buildings should be well aërated and lighted, dustless, and as far as practicable should have jointless floors and wall spaces, quiet, bright interiors decorated in tints sympathetic to the eyesight, with pictures and other necessary aids to culture and refinement as a necessary environment during the impressionable age of childhood and adolescence.

EDWIN T. HALL.
J. OSBORNE SMITH } *Delegates.*

COMPETITIONS.

J. E. Beale's New Premises, Bournemouth.

The Competitions Committee of the Institute announce that particulars of the above competition have reached them so late that they do not feel justified in recommending the Council of the Institute to debar members from competing, as they otherwise would have done, but they desire to point out that the conditions are very unsatisfactory.

CORRESPONDENCE.

The Comacines.

Briantcroft, Milford-on-Sea, Hants:
27th September 1910.

To the Editor JOURNAL R.I.B.A.,—

DEAR SIR,—May I be permitted to thank Mr. Sirr for his kind review of my little book on the Comacines? His words are a stirring encouragement to pursue my theme yet further.—Believe me, Yours faithfully,

W. RAVENSCROFT.



Upper Story of the South Transept Front, Church of the Holy Sepulchre. From a Photograph, made in 1860, kindly lent by the Palestine Exploration Fund.

THE CHURCH OF THE HOLY SEPULCHRE, JERUSALEM.—III.

By Geo. Jeffery, Curator of Ancient Monuments, Cyprus.

[*Continued from p.* 763.]

THE BUILDINGS IN THEIR PRESENT FORM.

THE CHURCH AND AUGUSTINIAN CONVENT OF THE TWELFTH CENTURY.—THE ARAB-TURKISH CUSTODY.—THE REBUILDING AFTER THE FIRE OF 1808.

THE study of the existing group of buildings is complicated by many remarkable circumstances. The visitor to the Holy City is confronted by the appearance of the half-ruined, half-rebuilt remains of one of the grandest monuments of the Middle Ages, tenanted by representatives of every branch of existing Christianity except the Protestant;* and these various sects occupy the place as the tenants of Mohammedan owners of the property.

As a consequence of this anomalous condition of affairs, the different tenants seek every opportunity to gain an advantage over each other, but up to the present time their mutual rivalries have only resulted in maintaining the property, as far as its structure is concerned, in very much the condition in which it was first handed over to the Mohammedans.

The sects at present occupying the Holy Sepulchre buildings are: Latins, Orthodox Greeks, Armenians, Syrians (Syriac Jacobites), Copts, and Abyssinians. At the time of the Latin kingdom of Jerusalem the then dominant Latin Church appears to have permitted the

* The German "Johanniter Orden," which occupies a portion of the north-east corner of the area, possibly within the ancient precincts, may perhaps be considered to represent the Protestant section.

presence of the above-mentioned sects, together with others which have since become absorbed into the larger communions or have died out. At the time of Ludolph von Sudheim's pilgrimage (*c.* 1350) the Georgians were in possession of the key of the Holy Sepulchre itself, and the Nestorians, "*pessimi heretici*," and some mysterious sect distinguished by a "cauterised" cross on the forehead, impressed with a hot iron, are mentioned.

Whatever may have been the circumstances under which the different sects obtained possession of their distinct properties, and rights to the usage of those nominally belonging to other forms of Christianity, the settlement of the present day must evidently date from 1810, the year when the rebuilding of the Anastasis is considered to have been completed.*

In attempting to describe the buildings as they stand at the present moment it is perhaps best to follow the custom of the mediæval pilgrims, who invariably begin their accounts with the Anastasis, and then follow the course of the daily procession which is still conducted to the different stations in a certain order by the Franciscan monks, who in a sense act as *ciceroni* of the monuments for the pilgrims and tourists of modern days coming from the West—from Europe and America.

In following this order it is well to begin with (1) the plan and general design of the twelfth century church; then (2) the Rotunda, and (3) the Tomb, in their modernised condition; (4) the "Chorus Dominorum" and Transept; (5) the northern side of the church and the Patriarchal Palace; (6) the South Transept; (7) the Chapels on Calvary; (8) other holy sites within the church; (9) the chapel of St. Helena; and lastly (10) the Campanile. The Augustinian Convent, and the traces of St. Mary the Latin, although intimately associated with the buildings and forming part of them, may be considered under separate heads.

The modern ritual arrangements and furniture of the chapels belonging to the different sects are without any kind of interest. The "Chorus Dominorum" of the Latin Crusaders has been fitted up by the Orthodox as their "Metropolis" or "Catholicon," and is precisely like any other nineteenth-century Greek church with its deplorable architecture and gaudy painted woodwork of the most tasteless description. As far as such details are concerned, there is probably not one item which could by any stretch of the definition be considered a "work of art" in the whole building. Even the icons and wall paintings are the poorest of their kind.

THE PLAN.

At the present day we possess the general plan and proportions (both very remarkably preserved in spite of past vicissitudes), a very great part of the decorative architectural details, and much mutilated sculpture, of the original *new* building of the twelfth century. The once splendid mosaics are, unfortunately, entirely gone, and the Rotunda and eastern apse are rebuilt in the Turko-Greek style of the nineteenth century on the ancient lines and proportions (see fig. 21).

The design of the new church was very imposing and, considering the period and conditions of artistic development, on a very large scale. Few buildings of the twelfth century rivalled it in size. Perhaps the only churches resembling it of equal or greater proportions, at that time

* As an illustration of the existing conditions under which the Holy Sepulchre is held, the following extract from correspondence presented to the English Parliament in 1854 may be quoted:—"After the Corban Bairam festival, the Commissioner Afif Bey, with a suite of local effendis, met the three patriarchs, Greek, Latin, and Armenian, in the Church of the Resurrection, just in front of the Holy Sepulchre itself, and under the great dome; there they were regaled with sherbets, confectionery, and pipes, at the expense of the three convents, who vied with each other in making luxurious display on the occasion. M. Botta, the French consul, was the only consular person present." On other occasions, especially of late years, the Moslem landlords have been called upon to settle disputes amongst their tenants, and hold meetings within the sacred precincts of a less genial character. All transactions between the Moslem owners of the property and their Christian tenants, whether in settlement of disputes, the gathering of taxes, or other matters of the kind, seem to be carried on in the church itself, and every day the Moslem custodians solemnly lock and unlock the great door, and only entrance, of the church, with three great fetter locks as in the middle ages. The great door is still only open in the daytime during certain hours.

in existence, would have been Santa Sophia, Constantinople, or the older rotundas of the Pantheon and San Stefano, Rome; and certainly none other excelled it in boldness and novelty of construction. The great Basilicas of Rome, the wonder and admiration of an earlier period, were of so utterly different a style as to admit of no comparison with the new church of Jerusalem and its Gothic vaults and domes of the new fashion.

The Crusaders evidently carried in their train many master-masons and architects who belonged to that expiring school of Romanesque art of the twelfth century, the monuments of which are scattered over the south of France, Provence, Savoy, the greater part of Italy, and

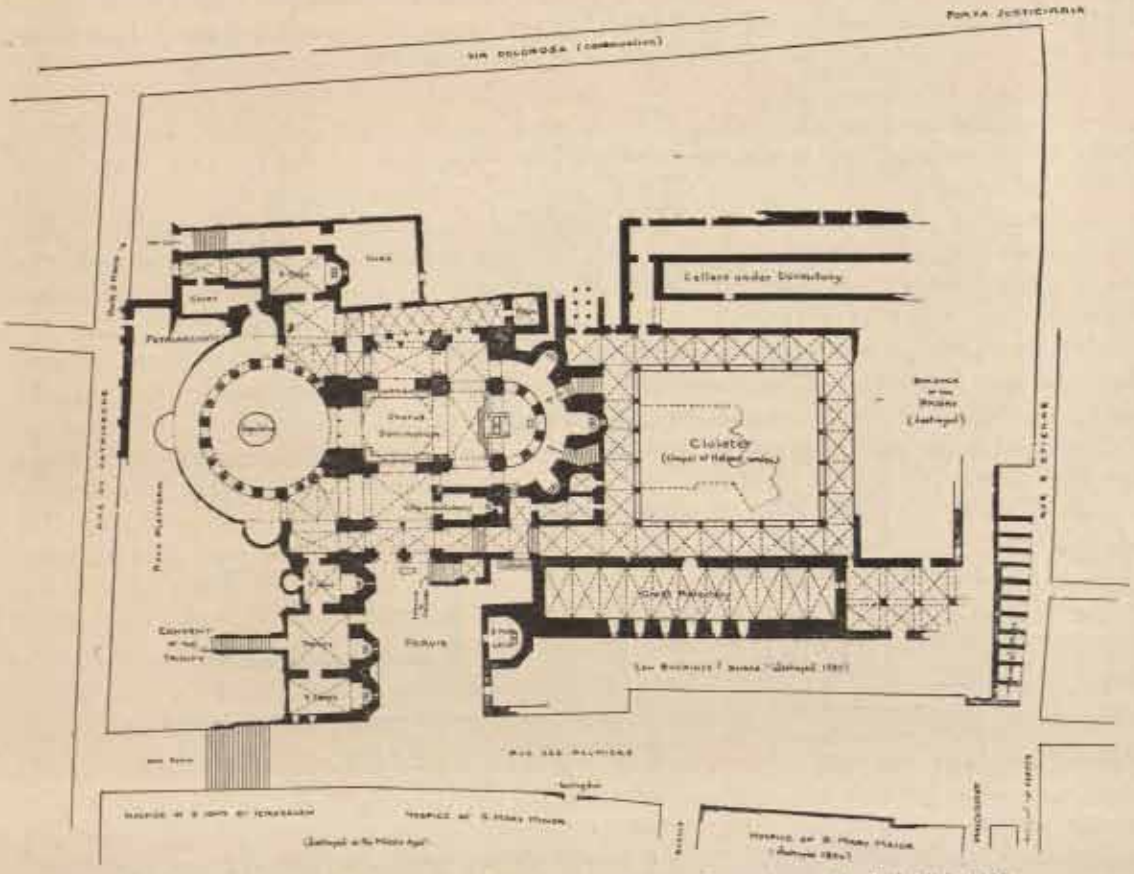


FIG. 31.—Plan of the Holy Sepulchre Church and Augustinian Convent as originally built in 1150. Traced from the Ordnance Survey Plan of 1864. Scale, $\frac{1}{1250}$.

in fact all round the littorals of the Mediterranean and Adriatic. The artists and artizans of the period who followed the Christian armies were naturally drawn from the nearest European shores, whilst their masters and employers were Normans, Flemings, or even in some cases Englishmen. As a consequence the Provençal style of art is particularly pronounced, the great domical churches of France seem peculiarly akin to many of the principal crusading monuments of the Holy Land, whilst the sculptors of Arles or Pisa are represented in their decorative carvings. Saint-Front, Périgueux, which has often been compared with the Holy Sepulchre church as an example of the pointed domical style, was burnt in 1120, and its reconstruction was contemporary with the new building in Jerusalem. It is therefore of special interest to find that the two buildings resemble each other in some particulars. At the same time it is

curious to observe how much advanced the Church of the Holy Sepulchre appears to be in the Gothic style of plan and detail when compared with the French example.

Nearer the Levant, the churches of Venetia, St. Mark's, Venice, Sant' Antonio, Padua, and a host of other examples originally of the twelfth-century Italian style, display the same domical-pointed arch construction, but have less organic character, and less of that vitality of design which was becoming evident in the early Gothic architecture of France. The prevailing architecture of North Italy was also in brick and marble—materials unknown in the Holy Land. The mosaic decoration which seems to have been lavished on the interior of the Holy Sepulchre church certainly suggests a strong Italian influence in the design—an influence which may be traceable to the inevitable employment of Italian artists for the decorative details, although the

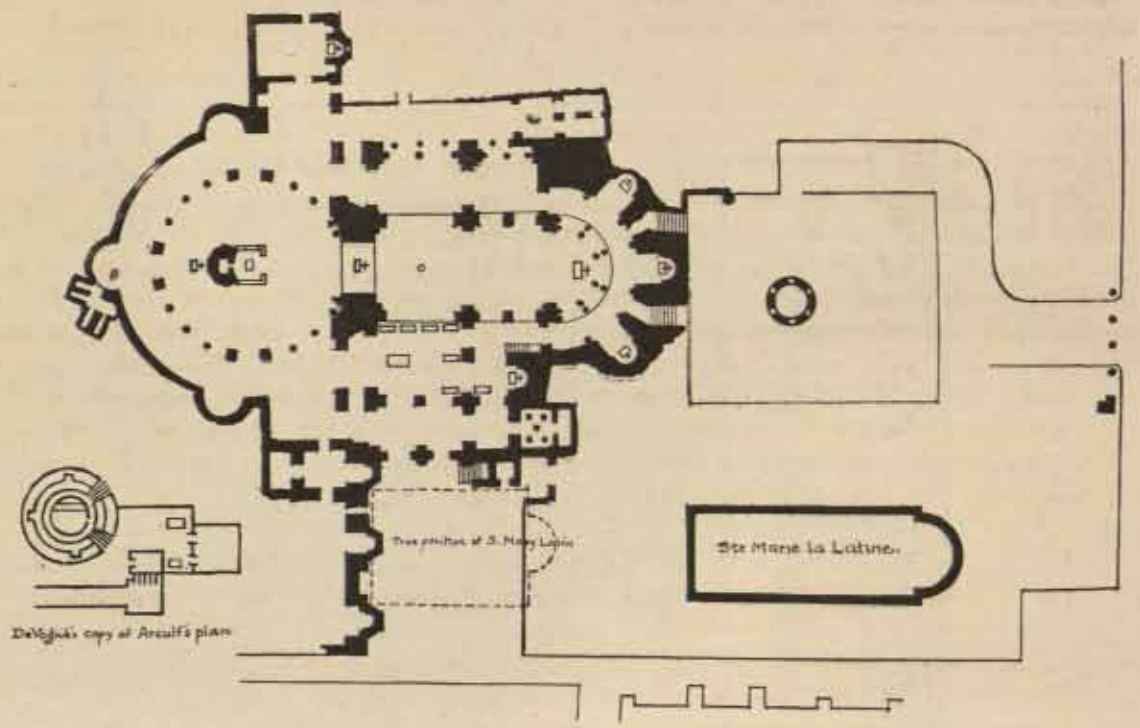


FIG. 22.—De Vogüé's Plan of the Holy Sepulchre Church, with the position of S. Maria Latina, as corrected by G. Jeffery (see page 821).*

general construction and masonry remained in the hands of the French architect—whose name has been handed down by tradition as "Jourdain."

Two of the most graphic accounts of pilgrimages in the twelfth century giving careful descriptions of the buildings then recently consecrated are by John of Wurzburg (1150) and Theodoric (1175), both supposed to be of German origin. These stories of travel, along with many others of contemporary date, have been reprinted in English by the English Palestine Pilgrims' Text Society, connected with the Palestine Exploration Fund. Unfortunately, in many cases books of this kind have been translated by persons imperfectly acquainted with the topography of the places in question or with technical terms in use at that remote period. Consequently it is necessary in the following extracts to suggest some slight differences in the reading of words which, although literally correct, may not very clearly represent the author's

* This plan made by De Vogüé in 1860 seems to have been copied from the plan made by Mr. Scoles in Williams's *Holy City*, ii., p. iii, see p. 177 of *Eglises de la Terre Sainte*.

meaning. With the aid of these graphic records, and by comparing them with the still well preserved mediæval remains, we obtain a very fair impression of the once splendid church in the days of the Latin kingdom of Jerusalem.

To the pilgrim of the twelfth century the new building of Jerusalem appeared a novel and splendid revelation of architectural art. More especially would a German or Englishman accustomed to the ponderous character of the round-arched style of Northern Europe be impressed by the comparatively lighter and more elegant forms of the earliest pointed architecture.

John of Wurzburg (1150) gives the following description of the interior of the church :—

"Columns, eight round and eight square, are arranged in a circle; but now on their eastern side their number and arrangement are altered, because of the new church which has been built on to them, the entrance to which is at this point. This new building contains a spacious Choir of the Canons and Sanctuary, and a high altar dedicated in honour of the Anastasis, that is of the Holy Resurrection, as is shown by a picture in mosaic-work above it. Outside this Sanctuary and within the cloister is contained a space sufficiently wide in all directions both through the new buildings, and through the old building round about the aforesaid monument, to be suitable for a procession," [*i.e.* an ambulatory is carried all round the new church as well as the old circular building] "which takes place every Sunday night from Easter to Advent at Vespers, to the Holy Sepulchre with the respond *Christus Resurgens*."

It will be noticed that the old circular church was carefully retained by the Crusaders, and indeed survived in an almost intact condition until the unfortunate fire of 1808.

The ambulatory referred to by John of Wurzburg seems to be the encircling aisle of the rotunda, which is now closed up with partitions and appropriated by different sects. When merely divided from the central space by open arcades, it must have added immensely to the interior effect of the circular church. The curiously preserved "tomb of Nicodemus" would be entered, as at present, from a little apse or chapel on the west side of this ambulatory. The rotunda seems to have possessed this ambulatory, with a gallery above and a third story of niches over all, until the fire of 1808. It is represented in the same form in the illustrations to Zuallardo's *Viaggio* (1586), and in the other old pilgrims' books.

THE ROTUNDA.

De Vogüé, in *Les Eglises de la Terre Sainte*, gives a restoration on paper of the rotunda as it must have appeared in the Middle Ages. His restoration seems sound, although the number of columns does not agree with the older descriptions (see fig. 22).

Theodoric (1175), speaking of the rotunda, says :—

"The church is vaulted both above and below like the Church at Aix-(la-Chapelle). It is supported in the same way by eight piers and sixteen columns. The lower stringcourse which runs round the whole church glows with mosaic work of incomparable beauty. On the wall itself rests a leaden roof supported by rafters of cypress wood, having a large round opening in the midst."

This account is a little vague, as it is evident that the rotunda of the Holy Sepulchre could never have resembled, except in a very general way, the famous circular church of Charlemagne, a building of much smaller area and of a completely different method of construction.

After the fire of 1808, which calcined and destroyed the encircling arcades with their columns, and consequently reduced the surrounding galleries to a complete ruin, the rotunda was reconstructed *de novo*. The outer semi-circular wall, following the rock cutting of the earliest period, seems the only part to have been retained.

The style of the rebuilding was poor in the extreme, and closely resembles the usual mosque-building of that period, than which nothing could be much more inartistic, or at least merely utilitarian. In the new rotunda there is not a single attempt at artistic expression. The domical covering was carried on a wall pierced by narrow arched openings about fifty feet high in place of the triple arcades of the former building. The divisions between these openings have the

appearance of square piers or pilasters with a connecting wall behind them. At the level, apparently, of the ancient triforium a similar gallery was arranged for the convenience of spectators during the ceremonies of Easter, and also for the customary vigil of the Latins and Armenians. Above this triforium in the position of the former panels containing mosaics a second gallery was substituted. The appearance of the interior was completely altered by this rebuilding, although the general proportions and dimensions seem to have been adhered to with Chinese exactness. Even the new Russian dome, constructed about 1870 in place of the wood covering of 1810, is evidently confined within the exact limits of its predecessor.

The diameter of the rotunda appears to be 66 feet, and the height of the dome inside must be about 90 feet. But as originally built, with an open arcade, the circular church measured 115 feet in diameter, according to the plan of the Ordnance Survey.

In this connection it may be observed that no such remarkable case of restoring an ancient building has ever taken place before or since the rebuilding of the Holy Sepulchre rotunda. The Christians were permitted by their Turkish landlords to rebuild the premises, but doubtless with the most stringent regulations and restrictions, and, fortunately for history, these peculiar circumstances involved the most scrupulous reproduction in dimensions of all that had been burnt.

The studied simplicity, or rather baldness, of design in which the great square pilasters carrying the dome are executed, and the absence of any architectural detail or moulding, have a depressing effect upon the beholder, more especially when it is remembered that they replace a mediæval building of great beauty and originality. The ugly square pilasters, by the immense size of their parts, detract from the apparent size of the interior, and serve to dwarf the central monument.

NOTE ON THE DOME OF THE ROTUNDA AS IT EXISTED DURING THE EARLIER PART OF THE NINETEENTH CENTURY.

Under the date 4th May 1852, Dr. Robinson, in his *Biblical Researches*, p. 196, states that "the great dome over the sepulchre was covered only with boards, and these again with lead. The lead was now in great part stripped off, and the boards rotten, so that in winter the rains fell thick and heavily within the rotunda below." It is singular that the work should have become so decayed in the course of only forty-four years.

In Dr. Schick's model of the church now preserved in the library of St. George's College, Jerusalem, which was probably made about the middle of the century, the dome is represented as constructed of sixty-five curved ribs meeting in a circular curb round the central opening, while a large purlin connects them together half-way between the central opening and the wall plates. It appears as if Herr Schick had the intention of copying something at one time in existence, and which he had actually seen. The Holy Sepulchre was evidently covered with an ordinary looking hemispherical wooden dome with an opening in the middle, in place of the straight-sided conical covering destroyed by the fire of 1808.

In the old illustrations of the church before the fire of 1808 the covering of the rotunda is invariably shown as a straight-lined conical roof. The straight beams of the original construction show as a ceiling within the church. In Zuallardo's picture of the south front, however, the roof of the rotunda appears as an ordinary hemisphere dome.* The reconstruction of the covering in the nineteenth century after the fire of 1808 very probably resembled that of the great wood dome of the neighbouring "Kubbet es Sakhra" in the great mosque enclosure of the Haram. The Levantine builders have displayed considerable ingenuity in covering over

* This may be a mere concession to the fact that in Zuallardo's days roofs over circular buildings were usually of a distinctly domical form.

large areas with wood roofs, *e.g.* the roof of the Basilica of Bethlehem, constructed in a manner unlike any European method of carpentry. There are not wanting traditions of much earlier times, when strange *tours de force* in carpentry were executed in the Levant, such as the Odeium of Herodes Atticus in Athens, the cedar covering of which remains a puzzle in construction to modern engineers.

The present hemispherical covering is constructed with iron lattice girders converging to the central opening and braced together, with an external covering of lead and a plaster ceiling beneath them. The latter is now in a dilapidated condition and the decoration of gilded stars on a blue ground is peeling off. The central opening is covered over with a common glazed skylight; the whole effect is poor and modern to an extreme.

THE TOMB.

In the centre of the rotunda stands the Tomb, the central object and shrine of the whole group of buildings. No longer exposed to the possibility of destruction by alien fanatics, nor likely ever again to be injured by such an accident as overwhelmed it in 1808, this remarkable object will remain sacred in the eyes of a large proportion of humanity for ages to come, and the true condition of what remains behind or underneath the deplorable-looking stone and native marble casing with which it was covered over in 1810 must continue a mystery.



Fig. 23.—The Holy Sepulchre as represented by Amico, 1596 (from De Vogüé).

As an example of the peculiar taste of the Orthodox Church at the beginning of the nineteenth century it possesses but trifling interest. Its chief curiosity consists in its close resemblance to what may be termed the Turkish style of the great Constantinople mosques, a sufficient evidence perhaps of its present ownership and of the nationality of the architect or mason to whom its design is due. The same large clumsily moulded panels of stone divided by slender marble columns, the same exceedingly coarse attempts at cornices and other blundered architectural details, impress the European visitor with repugnance—a repugnance heightened by the presence of the tawdry rubbish of modern ecclesiastical art (!) with which the monument is covered (fig. 32). The internal chambers of the Holy Sepulchre are lined with decorations of a taste which is even more deplorable—if possible—than the exterior.

Fig. 23 gives some idea of the appearance of the Tomb as restored by the Franciscans in the sixteenth century.

THE "CHORUS DOMINORUM."

The ancient choir of the Crusaders, measuring 110 feet by 42 feet, is now occupied by the Orthodox as their "Metropolis." Not a trace of any of its ancient decorations survives, and merely the bare outlines of its Gothic construction appear through the dirty plaster and whitewash of its interior. The eastern apse was entirely rebuilt in 1810, without any regard to its ancient design, although, as in the case of the rotunda, its dimensions seem to have been most scrupulously preserved. The central dome seems to have escaped untouched, and appears to be in exactly the same condition as shown in the engraving by Zuallardo, with the same steps forming a spiral line up the outside.

The pointed arches supporting the central cupola spring from square pilasters with a plain moulded architrave, and the windows are simple pointed arched openings with wide splays. The vaulting over the transept is of particular interest on account of its being constructed with

an ogive support for the diagonal ribs, a feature which differentiates pure Gothic from the earlier Romanesque. At the time when the Holy Sepulchre was being erected in Jerusalem the great cathedrals of Europe were also being planned, and the work in Jerusalem coincides in date with the early Gothic churches of Saint-Denis (1144), Chartres (1145), Noyon (1152), &c. It is of particular interest to remember that the same French king and queen—Louis VII. and Eleanor of Aquitaine—were present at the consecrations of Saint-Denis and the church in Jerusalem.

Our own English cathedrals of the eleventh century were also rising in all the majesty of their massive "Norman" naves at this period. Canterbury, Peterborough, Oxford, Norwich, Ely, &c. were almost completed as we see them at the present day. Durham Cathedral has a special interest for English architects on account of its ribbed vaultings, which are considered as the earliest attempts at such a system of construction—a system which became in after ages the particular characteristic of the Gothic style. According to many authorities, the "ogival" or ribbed vault certainly owes its origin to English mason-craft, although the use of the pointed arch may have been first adopted in France and Italy. In Jerusalem we see one of the first instances of this element in construction but recently introduced into French art from the English Norman style.



Fig. 24.—N.W. angle of the North Transept.

The design of the capitals of the aisle arcades, several of which remain in fair preservation in the interior of the church, recalls the usual type of French work of the period, but with a suggestiveness of Byzantine tradition in sculptured details. The plain unmoulded arches of the north transept, instead of springing direct from the capitals, are carried on a moulded architrave which also serves as a stringcourse. This is, of course, one of the characteristic features of Provençal work as well as that of the Levant.

With the exception of the moulded rib to the vaulting, all the arches of the twelfth-century interior are of a square section in different orders, starting from square piers or columns. The effect is bare and poor under the all-prevailing coat of dirty whitewash, but of course in the middle ages the surfaces were completely painted where not covered with mosaic (see fig. 24).

The external wall of the ambulatory surrounding the "Chorus Dominorum," with its three small *chevet* chapels, remains intact. This portion of the building is of the simplest construction, the chapels forming square recesses with apses of a semi-circular plan covered with simple hemispherical semidomes. The wall of the ambulatory has eight attached circular wall shafts, which once carried ribs in the vaulting, but the vault has been destroyed in the course of rebuilding the great apse in 1808. The capitals of these wall shafts are of the same "Corinthian" type as those in the arcades dividing the north transept from its aisles. The east aisle of the north transept forms the entrance to the "prison"; it is covered by a plain square vault without ribs.

An interesting architectural detail may be discovered by mounting on to the outside of the aisle roofs, which extend in flat paving after the usual Jerusalem manner all round the central portion of the church. Here the windows of the north and south aisles of the ambulatory, above the level of the circular portion, may be discovered. They are much mutilated and blocked up; that on the south side retains its Gothic arch with mouldings similar to the work on the south front, and supported on "Corinthian" capitals in the jambs. All the windows

in the buildings with the exception of those of the clerestory have been blocked up with masonry, which accounts for the singularly dark condition of the interior. This is more especially noticeable in the ambulatory of the "Chorus Dominorum," where the light is so deficient as to completely prevent any view of the three apsidal chapels or of their contents. The windows of the apsidal chapels have been walled up, and the only one which can be seen from the outside with its pointed arch and moulded dripstone is that of the central chapel.

Considered in a general way and as a twelfth-century design, the interior of the Holy Sepulchre Church strikes the visitor as bold and original. The spanning of the arches is on the largest scale, and the effect of spaciousness with nobility of proportions is the work of a trained architectural genius. A certain severity in detail, or rather an absence of detail verging on poverty, is perhaps a characteristic of this style of architecture, and may be noticed as much in the great churches of the South of France as in the huge interiors of North Italy of the same period. Denuded of all artistic decoration in colour and mosaic, the interior now seems a great contrast with the richly decorated façade of the south front. One can, however, see through all the rubbish and frippery which now fill the place that at no period would the interior have appeared of the richness of carved and moulded detail to which we are accustomed in European examples of the style. The fine effect of the interior is produced by those principles of design which were beginning to be displayed in the great cathedral architecture of Central France during the twelfth century.

We have an interesting record of the appearance and arrangements of the "Chorus Dominorum" at the time of the Latin Kingdom in the description by the German pilgrim Theodoric (1175), whose account of the architectural design and construction of the Rotunda has already been quoted. With characteristic German prolixity he gives a longer catalogue of all that was to be seen in the new building at the time of his visit than any of the other contemporary pilgrims. After describing the rotunda, he continues :—

"Moreover there adjoins this church a sanctuary or holy of holies of marvellous workmanship, which was subsequently built by the Franks. The Canons hold prebends, and half the offerings of the Holy Sepulchre are assigned to them for income, and half is appropriated for the use of the Patriarch. The high altar is to the name and in honour of our Lord and Saviour, and behind it is placed the seat of the Patriarch, above which hang from the arch of the sanctuary a very great and adorable picture of Our Lady, a picture of St. John Baptist, and a third picture of Holy Gabriel her Bridesman. In the ceiling of the sanctuary itself is represented our Lord holding a cross in His right hand, bearing Adam in His left, looking royally up to heaven, with His left foot raised in a gigantic stride, His right still resting on the earth as He enters heaven, while the following stand around: His Mother, St. John Baptist, and all the Apostles. Under His feet a scroll reaching from one wall to the other contains this inscription: 'Praise Him crucified in the flesh, glorify Him buried for us, adore Him risen from death.' Beyond this on a higher scroll drawn across the same arch is the Scripture: 'Christ ascending on high hath led the flesh captive and hath given gifts to men."

The apse wall on which these decorations appeared in the middle ages, and until the appropriation of the "Chorus Dominorum" by the Greeks, was completely pulled down after the fire of 1808 and rebuilt in a very different style.

"About the middle of the choir is a small open altar of great sanctity, on the flooring whereof is marked a cross inscribed in a circle, which signifies that on this place Joseph and Nicodemus laid our Lord's body to wash it after it had been taken down from the cross."

This would seem to be the "Holy Site" afterwards called the "Stone of Unction" which now occupies the centre of the floor in the south transept.*

"Before the gate of the choir is an altar of no mean size, which is however only used by the Syrians."

* The small open altar in the middle of the choir here referred to is probably the "centre of the world" stone of an earlier period, which the German pilgrim has confused with the "Stone of Unction." "The middle of the world" is described with drawings of the present vase-shaped monument. *P.E.F.Q.S.*, 1888, p. 260. Abbot Daniel states that in his time this spot was covered by a small domical building adorned with a mosaic.

No trace of such an altar now exists; the presence of such a feature in such a position is strange, but it continued to exist until the time of Zuallardo, who shows it on his plan of the church, 1586. Theodoric continues:—

"On the west side of the church (*i.e.* towards the north), near the door from which one mounts more than thirty steps up from the church to the street, in front of the door itself is a chapel dedicated to St. Mary, which belongs to the Armenians."

This evidently refers to the "chapel of the Apparition" (as it is now called), at present belonging to the Latin Franciscans.* The chapel is apparently of ancient construction, and the one mentioned by Sæwulf as belonging to the eleventh-century period of the church's history. The arched doorway at the top of the steps leading down to this chapel from Christian Street is still in existence, although the way down is blocked up and diverted. This arched doorway appears as if it had also originally formed the entrance to the Patriarchate, of which the façade with its massive buttresses seems still to survive in remarkable preservation fronting the Rue du Patriarche (modern Christian Street). The doorway is of the same curious design as the great front of the south transept. A square opening with two Romanesque columns is surmounted by a pointed arch treated in the "expanded concertina" design, over which is a moulded dripstone. It is still sometimes known by the name of "S. Mary's Gate."

THE PALACE OF THE LATIN PATRIARCH.†

Although so important a dignitary of the church as a Patriarch of Jerusalem must have been surrounded by a regular court during the palmy days of the Latin Kingdom, there are few if any references in the pilgrims' books to his palace, which still stands on the east side of the Rue du Patriarche. The interior of this building is now practically inaccessible. The upper stories seem partly disused, and approached from other neighbouring property, and the ground floor is cut up into small shops, which may or may not be of some antiquity. Its massive external wall with square buttresses and small splayed windows with pointed heads is the only interesting feature remaining.

The northern side of the church seems to have been much altered at some time subsequent to the Moslem occupation of Jerusalem in the thirteenth century. Theodoric states:

"Also on the left-hand side of the church, towards the north, is a chapel dedicated to the Holy Cross; and this chapel belongs to the Syrians. Also on this side, opposite this chapel towards the east, is a chapel of peculiar sanctity, wherein is a most holy altar of the Holy Cross, and a large piece of the blessed wood. The Christians are wont to carry this holy symbol against the pagans in battle. Near this chapel, on the east, one enters a dark chapel by about twenty paces; in this chapel our Lord is said to have been imprisoned."

These two chapels of the Holy Cross no longer exist. They must have stood on the site of the present Khankar mosque, which was evidently built partly for the purpose of overawing the Christians with its tall minaret, whence the Saracen soldiers could command the turbulent crowd beneath. The minaret of the small mosque of Omar on the opposite side of the church served the same purpose for the *parvis* of the church.

"Behind this chapel (the 'Prison') is an altar dedicated to St. Nicholas (now known as the chapel of St. Longinus). Beyond this is the gate of the Canons cloister, which stands round about the sanctuary."

A rudely rebuilt (?) arcade which passes outside the whole width of the north transept apparently dates from the time when the modifications were made to chapels and to the front of this transept; and the large latrines constructed for pilgrims passing the night within the church

* This chapel is said to have been secured for the use of the Latins and settled on the Franciscan Order by a king of Sicily in 1257 (Charles of Anjou, brother of St. Louis?). Close to this chapel is preserved the ancient quatrefoil font, evidently used formerly in the great church of the Latins. It would seem that the Moslem landlords had turned the Armenians out of this chapel, and permitted the Franciscans to occupy it during the period of revolution succeeding the Kharismian invasion of 1244.

† For list of Patriarchs see p. 720.

probably occupy the sites of the two chapels of the Holy Cross described by Theodoric. This arcade has at times been called the "Arches of S. Mary."

THE SOUTH TRANSEPT.

References to the southern or entrance front of the church—its only external architectural feature of importance—are rare in the pilgrims' books of the twelfth century. Perhaps this south transept façade appeared but insignificant in those days to Europeans accustomed to the magnificent cathedrals then coming into being in all the countries of the civilised world.

Theodoric (1175) is one of the few mediæval pilgrims who give some description of this façade. He says:

"Outside the doors of the church, in the space between the two doors, stands the Lord in a saintly garment as though risen from the dead."

The general design of the south transept façade is somewhat remarkable if not unique. Such an arrangement of two stories of large pointed arches of the same dimensions, the lower forming a double portal, the upper enclosing windows, does not recall any well known European building, although the detail of the architecture is purely Occidental. The great arches are built in a very singular manner, with an outer order of voussoirs cut with rounded bevelled edges: the effect is somewhat like that of an extended concertina of gigantic proportions, or of a starched frill. Such a treatment of arch stones is characteristic enough of Renaissance Art, but in early transitional from the Romanesque to Gothic it can only be taken as one of the many varieties of the "chevron" decoration so common in twelfth-century buildings.



FIG. 25.—Sketch (assisted by a photograph) showing the south side of the church as it existed in the twelfth century.

The lower, or portal, arches have a heavy dripstone cornice above the outer order. This cornice terminates in a very small corbel or boss over the central springing stones where the two arches meet above the central column. Possibly the statue of our Lord referred to by Theodoric may have been merely a painting on the wall between the two arches. In the sketch of this front (traced from a photograph) showing its appearance in the twelfth century the figure of Christ is represented in the usual position occupied by such a statue on the *trumeau* of a cathedral door. (Fig. 25.)

The general character of the carving on the front is that of the south of France of the period. A character common to both the Romanesque and Byzantine styles in the early ages of Christian Art makes it somewhat difficult at first sight to distinguish between what is really eastern from what is essentially western. The "Corinthian" capital, the dentil and console cornices and the familiar egg-and-dart mouldings continued in use under various modifications in all the provinces of the vanished Roman Empire until the coming of the genuine Gothic style. There is little to distinguish between the Romanesque churches of Spain and France, of Lombardy, Venetia or Tuscany and the far south of Italy, and the earlier buildings of the crusaders in the Levant. The stilted arches carried on well-proportioned nook shafts with "Corinthian" capitals of the Holy

Sepulchre recall such contemporary work as the churches at Arles, Tarascon, and elsewhere in Provence. The chief difference in the development of the style consists in the arches springing direct from a slight architrave moulding placed on the abacus of the capitals, instead of the usual intervening frieze and cornice which survives in many Provençal buildings.

Two finely carved stone panels of great width span the double portals of this front. These are also exceedingly suggestive of the famous front of the Abbey of Saint Gilles in Provence. The western of these two lintels is covered with a bas-relief representing the triumphal entry of Christ into Jerusalem riding on the ass. The effect of these small figures treated in a pictorial manner is precisely similar to the French work of the same period. The carving is excellent and full of vigour. Over the eastern doorway (now closed) the lintel is treated in a very different manner, as a panel of elaborate intertwining scroll leafage. This also is beautifully carved, but with somewhat more of a Byzantine character.



Fig. 26.—Earliest woodcut representation of the Church. "Viaggio da Venezia al S. Sepolcro." R. P. Noe, 1500.

The tympana of the portals seem to have been decorated at some period with a geometrical pattern or diaper executed in cement, the foundation probably of some mosaic decorations; and the whole front would undoubtedly have been treated in colour in the style of the period to form an appropriate background to the figure of Christ between the doors as described by Theodoric.

The elaborate bracketed cornices to both stories of the façade covered with egg-and-dart mouldings are thoroughly Provençal in style and give a singular richness to the design.

De Vogüé says that at one time the words "Iordanus me fecit" were to be seen inscribed on the south transept front.

The earliest woodcut representation of this façade shows it exactly as at present. This woodcut is here reproduced from Padre Noe's *Viaggio* of about 1500. (Fig. 26.)

THE CHAPELS OF CALVARY.

The external staircase leading up to Calvary is a noticeable feature of the transept front to which it is attached and of which it forms a part. The loggia, with three open arches at its summit, is ornamented with precisely the same cornices, columns, and carved arch mouldings as the rest of the front. Before its conversion into a Latin chapel it seems to have been used for some purpose by the Moslem officials, as they formerly had a "mastaba" or raised platform at the bottom of the short flight of steps where the guardians seem to have sat, as they do now on a similar platform within the church.

Theodoric (1175) describes the external entrance to Calvary:

"It remains now to speak of Mount Calvary. Before the doors of the Church, which are covered with bronze and of a double form, one mounts by about fifteen steps to a small chamber, which is railed and adorned with paintings. Here, at the top of the steps, stand guardians watching the entrance, who only allow so many pilgrims to enter as they choose, lest by excessive pressure, as often happens here, crushing and danger to life should occur. From this vestibule one ascends by three steps through another door into the chapel of Calvary."

The external staircase, with its open loggia at the top, remains much in the condition as seen by Theodoric, but half way down the stairs a column is built into the side wall, the use of which is not very evident. It looks as if designed to sustain a statue, or some heraldic badge.

Here a note may be made on the means taken in a few instances to assist in preserving the fabric of the church. Two heavy iron straps may be noticed banding together the sides of the external walls of the vestibule where the arches have perhaps shown some little disposition to spread. Nothing could be more satisfactory than to see such evidences of a desire to keep up the ancient building without any pretence at "restoration." The cupola covering the chamber is doubtless a mere modern invention put up at the time the vestibule was converted to its present use and when it was strengthened with the iron ties.

The alterations to the Calvary Chapels necessitated by the change in their approach—inside staircases being substituted for that on the exterior—are not of ancient date. In Zuallardo's picture of the two chapels viewed from the transept, he shows in his time the approach to have been by a staircase in the south choir aisle. After passing the chapel of the crowning with thorns (a dedication older than the sixteenth century) Zuallardo remarks:

"Di la nel medemo lato circa otto o dieci passi si monta per diecinovi scaloni, in due volte (dei quali una parte è di legno et nel portico proprio, che va intorno al choro, et l'altra di pietra, si truova nel concava del muro), al monte Santo di Calvario."

The present staircases to Calvary and the rebuilding of the arcade over the entrances of the church date from after the fire of 1808.

Note on the Calvary chapels.—Theodoric (1175) describes these chapels as follows:

"Upon the west side of Calvary" (meaning perhaps on the western arches or vaulting of the chapel, as there has always been a sort of triforium arcade where the modern inside staircase exists) "there is a picture on the wall in which these verses may be seen in golden letters:

> "This place was hallowed by Christ's blood before,
> Our consecration cannot make it more,
> Howbeit the buildings round this stone in date,
> Were on July fifteenth consecrate,
> By Fulcher Patriarch in solemn state."
>
> —*Pal. Pil. Text Society's translation.*

The upper chapels of Calvary would appear to have been untouched, as far as their decorations are concerned, since De Vogüé's visit in 1860. He states that he discovered the remains of the mosaic figure of Christ on the ceiling. At the present day all the chapels and rooms connected with the "monticulus" of Calvary have been embellished with the usual rubbish and frippery of Levantine ecclesiastical art, and any vestige of antiquity is very difficult to trace in the profound obscurity. The chamber contiguous to Calvary marked on De Vogüé's plan as "débris de l'église de Modeste" can no longer be identified under such a name.

THE BELL-TOWER (CAMPANILE) BUILT BY THE EMPEROR FREDERICK II.

The Emperor visited Jerusalem in the spring of 1229 in pursuance of his famous diplomacy and policy of conciliation. The bell-tower, which is usually attributed to the Emperor, must have been erected during the fifteen years which elapsed between his visit and the final loss of Jerusalem

in 1243. During this period the Latins are said to have numbered over six thousand within the Holy City; it is not therefore surprising they should have left so imposing a memorial of their presence.

The original design of the tower is preserved in the woodcut of the south transept façade in Padre Noe's guide book (1500). It possessed two stories above the high ground floor, which latter constitutes a chapel, forming one of the series of three on the west side of the *parvis*. These three stories of the square portion of the tower were crowned by a fourth stage, of an octagonal plan, covered by and terminating in a pointed dome of a specially German character, a character which is represented in the towers of the Apostles' Church, Cologne, and other Rhenish examples of the eleventh and twelfth centuries.

Although the terminal octagonal stage had this German character, which in Germany is usually accompanied by the round arched style, the masonry of the lower part of the tower (the portion which survives at the present day) is of a very ordinary thirteenth-century Gothic pointed-arch detail. The two remaining upper stories of the tower have arcaded sides; two arches with roll-mouldings and dripstones carried on short columns with square abaci to the capitals decorate the present top story facing the parvis.

Massive buttresses at the angles of the tower give the full character of perfected Gothic construction, although they were not apparently planned with a clear conception of the purpose in view. The whole design has an ill-planned, accidental appearance, and is very much out of harmony with the venerable façade to which it is clumsily attached, and which it partly conceals.

The absence of any carved detail about the tower prevents a very clear impression of its exact date, but the general design and character of the work clearly point to the very last years of the Christian occupation of Jerusalem.

As already remarked, the lower part of the tower forms a small chapel, which is dedicated to the forty martyrs, a dedication which perhaps dates from the time of the Patriarch Thomas (813), who instituted a commemoration of his remarkable dream by erecting an altar somewhere within the precincts of the Holy Sepulchre. In one corner of this chapel is preserved a large sarcophagus said to contain the bones of certain patriarchs. This chapel was originally dedicated to St. John, or at least a chapel which occupied the same position, and is one of those mentioned by Sæwulf. These chapels seem to have changed names at different periods; in Murray's handbook for Jerusalem, 1858, they are described as "built before the Crusades. The first is dedicated to St. James, of whom tradition says that he celebrated mass and was consecrated here. The second was originally called the Chapel of the Trinity, and Beugnot remarks that all the women of the city were married, and all the children baptized, in it. It is now named the Chapel of the "Ointment-bearers"—that is, Mary Magdalene and her companions, and is the parish church of the Greeks. There is another small chapel, dedicated to St. John, in a line with the above, on the basement story of the great tower.

THE HOLY SITES WITHIN THE CHURCH.

It is a little singular that most, if not all of the "Stations" or Holy Sites which constitute the object of religious pilgrimage to the Holy Sepulchre Church, appear to be of considerable antiquity. And at the same time the different sects of Christians seem to agree at least in recognising the sites belonging to rival religions as equally authentic.

The Holy Sepulchre itself seems to be in the custody of a general committee of the sects under the auspices of the Turkish Government, which appears to regulate its use according to circumstances.

At the west end of the Holy Sepulchre (on its outside) is a little chapel now belonging to the Copts. This seems to have been in existence formerly on the east side of the sepulchre under

the arch dividing the rotunda from the great choir. It was re-erected in the modern taste, after the fire of 1808, in its present position.

One altar or Holy Site alone seems to have been reconstituted at the restoration of the buildings in 1810. This was an altar in the middle of the great choir which occupied the "Centre of the World," of an earlier period. A stone column now marks this place called "Compass" in the remote period of Arculf and Abbot Daniel.

The tombs of six, or perhaps seven, Latin Kings of Jerusalem were swept away after the fire of 1808. The tombs were of Godfrey de Bouillon, Baldwin I., Fulk (?), Baldwin III., Almeric, Baldwin IV., and Baldwin V. The first three were buried within what is now the Chapel of Adam; the other four lay in a row across the south transept arch of the choir. No trace remains of their

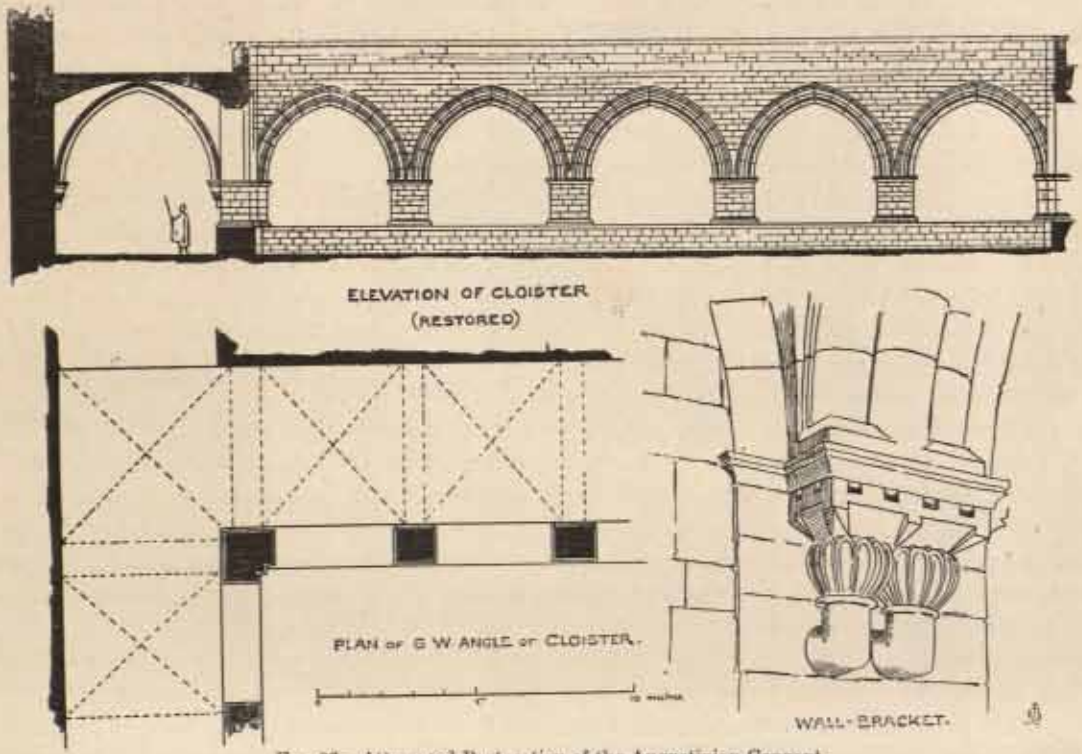


FIG. 27.—Attempted Restoration of the Augustinian Convent.

monuments, and the site of the tomb of Fulk of Anjou, pointed out as the grave of Melchisedech (!) during the nineteenth century, has since disappeared.

The marble circles in the flooring at different points within the church have a certain antiquity, dating at least back to the Crusades. The Stone of Unction, the Crowning with Thorns, the Division of the Garments, the Apparition of the Gardener, the Column of Flagellation, the "Stabat Dolorosa," are all probably of that period: at least, they appear in the old guide-books, such as Sigoli (1384). The three chevet chapels of the "Chorus Dominorum" are respectively identified with the "Crowning," the "Casting Lots for the Garments," and the "Column of Flagellation."

The Chapel of Abraham, a curious upper story over the Chapel of Calvary, appears to be of the twelfth-century building, and its window forms part of the great façade. It is merely a square chamber without architectural character beyond some marble and mosaic decorations designed by the present writer, and executed at the expense of certain English clergy, in 1893.

The greater part of these decorations have since been removed by the Greeks. This chapel is shown on Zuallardo's plan of the church. It is approached through the Greek "Convent of Abraham," and not from inside the church.

THE AUGUSTINIAN CONVENT OF THE HOLY SEPULCHRE.

The ruins of the Augustinian Convent of the Holy Sepulchre are of great interest. The remains which exist *in situ* are the north-west and south-east corners of the great cloister, the greater part of the Refectory on the south side of this cloister, and the undercrofts of the Dormitory on its north side. At the south-west corner of the cloister some portions of the vaulting may also be observed.

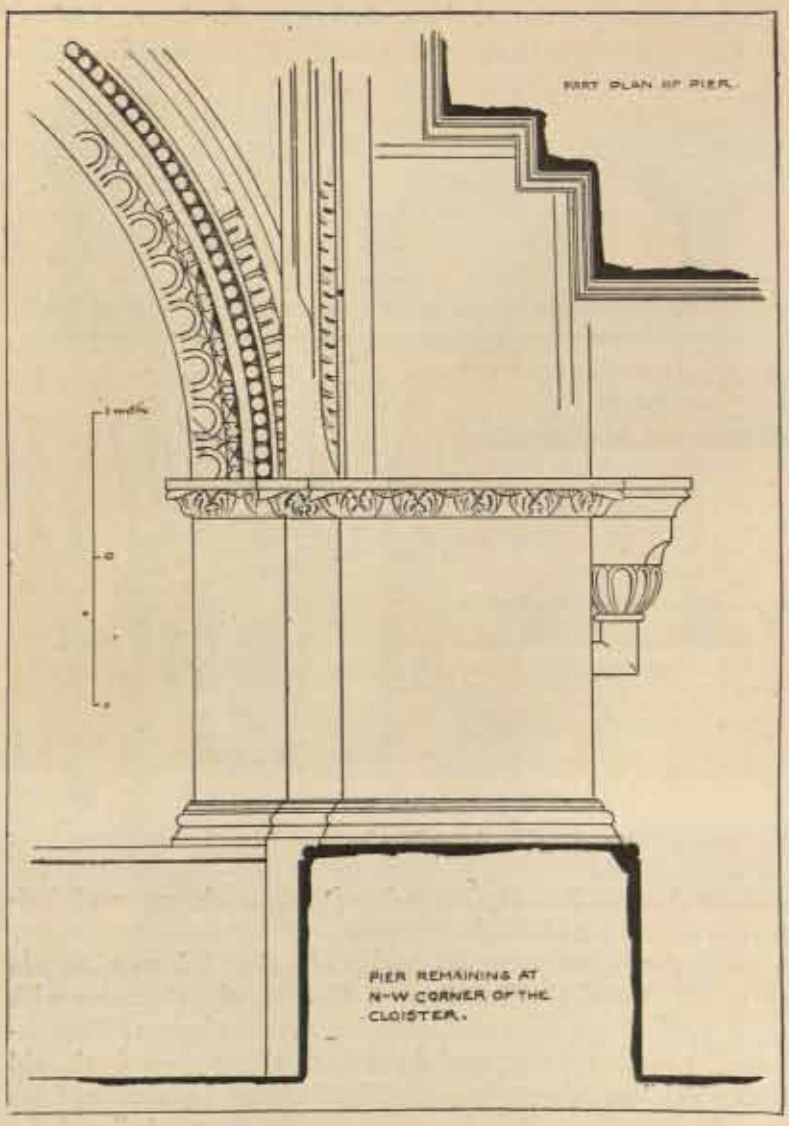


FIG. 28.—The Cloister of the Augustinian Convent. Details.

De Vogüé was led into a strange fancy of identifying the remains of the cloister, with its pointed arches and clumsy egg-shaped ornaments, with the work of the fourth century—a strange error for an architectural student to commit.

Plans and details of the existing remains and of the general design of the cloister are shown in figs. 27, 28 and 29.

The Order of Canons Regular of St. Augustine, founded in the eleventh century, obeyed a rule which was almost identical with that of St. Benedict, and as a consequence the arrangements of the convent enclosure followed the usual regular plan of a western monastery. The very exceptional nature of the site occasioned a slight divergence from the more usual monastic plan in as far as affected the relative positions of the different portions. During the twelfth century the cloister-garth of a monastery was more usually built against one side of the nave of a great church, but in the present instance the circular form of the Anastasis and the nature of the site in the midst of a crowded city obliged

the placing of the conventual buildings around the east end of the new choir of the church. Such an arrangement, although very exceptional, is not altogether unknown elsewhere; for instance, the famous church of St. Francis Assisi has the cloister in a similar position.

Amongst the numerous descriptions of the mediæval buildings by pilgrims of the twelfth and thirteenth centuries occur such entries as :—

"The Canons' cloister which stands round about the sanctuary."—Theodoric, 1175; *P. P. T. Soc.*, 1895.

"On issuing by the Canons' door from the Church of the Sepulchre, on the left hand is the Dormitory, and on the right hand the Refectory and also the Mount Calvary. Between these two divisions of the convent are the cloister and cloister-garth. In the middle of the garth is a great opening, through which may be seen the chapel of S. Helena, which is below."—Ernoul, *Le Citez de Jherusalem*, 1231; *P. P. T. Soc.*, 1895.

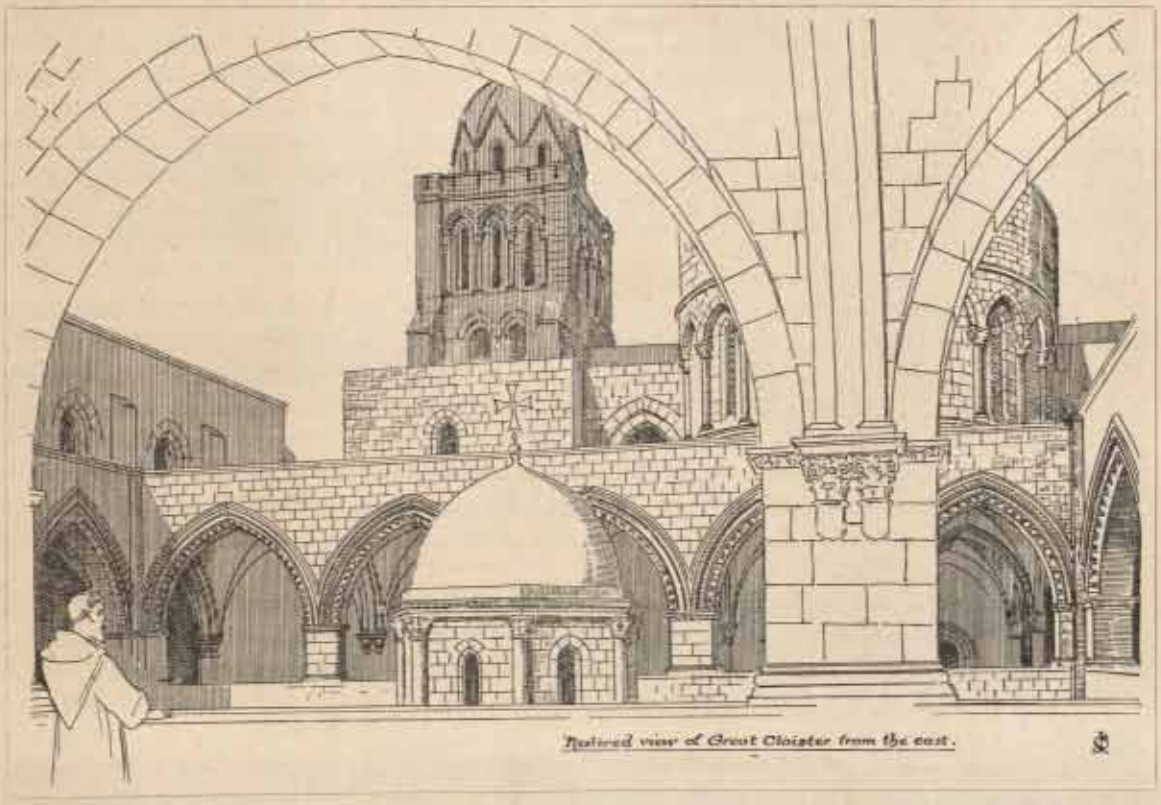


FIG. 29.—Attempted Restoration of the Cloister of the Augustinian Convent. View from the eastern side.

"After one has made the circuit of the cloister, and is re-entering the church from the other side (the south), one notices a figure of Christ on the cross painted above the doors of the cloister so vividly as to strike the beholder with great remorse. Round it this verse is inscribed :—

'You that this way do go,
'Twas you that caused My woe;
I suffered this for you;
For My sake vice eschew.'

To the eastward of this one goes down into the venerable chapel of S. Helena."—Theodoric, 1175; *P. P. T. Soc.*, 1895.

The entrances, both north and south, into the cloister from the church have been walled up. The Canons' door, on the north, was conveniently planned in relation to the Dormitory so that the monks might descend direct into the church for their night offices. The continuation of

the staircase up to the now vanished Dormitory may probably be traced in the entrance of the large Coptic convent of modern times, built on the north side of the ancient precincts.

The Dormitory lining the north side of the cloister is no longer the original structure of the Middle Ages, although its walls may in part survive within the later construction. The general plan of this portion of the convent may, however, be detected in the undercroft or cellarage which formed its ground floor, and which is still fairly well preserved. Here it may be noted that in the later developments of monasticism the dormitory or general sleeping apartment of the Benedictine rule, whilst being retained in theory, was often divided up into cells by low partitions, as at the Premonstratensian Abbey of Bella Paise in Cyprus, or in many of the Dominican convents of Italy. No indications remain of the actual size of the Dormitory.

As already remarked, the Refectory on the south side of the cloister is partly preserved. Two bays of its vaulting at the west end still stand intact, the space beneath them having been converted into a church by the Greeks at some period. The area of the Refectory seems to have been about 33 metres by 9 metres, proportions which appear to have been common in buildings of this type. It was covered with either six or seven bays of simple cross-vaulting without cross-ribs. Each bay was lighted with a window on either side, of a single light with pointed-arch head and sides, and sill deeply splayed in the thickness of the wall. These windows occupy the wall space between the apex and the spring of the arches above a string-course which serves to unite together the pilasters which carry the pointed groining.

The eastern part of the Refectory is almost completely lost in the ruins which are now inhabited by the Abyssinians, or which have been pulled down in the course of constructing the new Russian premises on the site. The eastern side of the cloister is also missing, and nothing resembling the architectural building of the twelfth century can now be detected in the squalid modern buildings which cover the site of the Basilica. A row of ancient shops fronting the Bazaar (formerly Rue Saint-Etienne), and forming, doubtless, the boundary of the Holy Sepulchre property on its eastern side, still survives. To judge by some traces of a sculptured string-course at their southern extremity, these interesting relics of ancient commerce must be contemporary with the Priory buildings.

The Canons' doorway, leading from the cloister down into the church at the north-east angle of the "Chorus Dominorum," is one of the few surviving ornamental features of the interior. A chevron-moulded arch above a square lintel is carried on two Romanesque columns as nook shafts in the style of the great façade of the church. The passage and staircase leading up through this doorway are now walled up.

In the centre of the cloister garth stood (and still stands) the unusual feature of a cupola lighting the underground chapel of St. Helena beneath. The present octagonal erection which answers the purpose has the appearance of being a rebuilding of the original out of old materials, and doubtless belongs with the chapel of St. Helena below to some period of squalid restoration after the events of 1244.

The cloister garth and the greater part of the Refectory are now occupied by Abyssinian monks, who have built their mud huts amongst the ruins, whilst the east and north walks of the cloister, long since destroyed, have become a crooked lane leading to the chief Coptic convent.

In this connection perhaps a reference may be made to the probable continuity of such an important foundation as the Augustinian Convent of the Holy Sepulchre in the history of the Levant subsequent to the loss of Jerusalem. The great Abbey of Bella Paise in Cyprus was doubtless a daughter house of the great convent in Jerusalem. Its origin is obscure, but it was at first a convent of Canons Regular of St. Augustine, and subsequently, in 1206, passed under the reformed rule of Prémontré. It became the representative of the Augustinian Order in the Latin kingdom, transferred from Jerusalem to Cyprus, and as the finest monastic building

remaining in the Levant it is a worthy successor to the great church of Jerusalem. It carries on the tradition of fine architecture by being in the more perfected style of geometrical pointed art.

ST. HELENA'S CHAPEL.

This venerable-looking but squalid underground chamber appears almost too poor a structure to belong to any period before the general destruction of the Priory buildings which were built above and around it. It was probably rebuilt in its present rude and clumsy manner at the end of the thirteenth century, when the Priory was given over as a quarry for second-hand building materials. Four roughly constructed pointed arches, eight cross-vaults, and a central cupola are carried on four ancient granite columns with capitals and bases which have no pretension to fit their present purpose. The capitals, which are too large for the shafts on which they stand, are so mutilated as to be unrecognisable in style, but they certainly have nothing to do with the fine architecture of the twelfth century.

The "Cross-finding Chapel," an ancient cistern at the south-east corner of St. Helena's Chapel, is described at p. 718. It possesses nothing of architectural character.

The doorway leading down by a staircase from the ambulatory of the "Chorus Dominorum" into St. Helena's Chapel seems to have been rebuilt. Instead of corresponding in design with the Canons' door on the opposite side of the church, it is now a mere square opening formed with a straight lintel without architectural treatment.

The gloomy, squalid interior of this strange underground shrine is one of the most impressive and at the same time picturesque examples of the kind in existence. It must be remembered that such an effect is due to dirt and decay, combined with historical associations, and has nothing to do with any artistic or archæological features—the only parts of the structure which are probably of great antiquity are the two side-walls on north and south. These two side-walls—the east and west ends have evidently been much modified in later ages—are doubtless the same which formed the enclosure of a crypt beneath the famous Basilica to which references occur in the earliest accounts of the Holy Sites.

SANTA MARIA LATINA.*

A venerable monument of a particularly interesting period of history may still be traced within the much-altered surroundings of the Holy Sepulchre Church. Although the circular church of the Anastasis survives in a miraculous manner—as far as plan and arrangement are concerned—very much as it stood sixteen hundred years ago, its surroundings have changed over and over again in the course of those centuries. One of the few portions of these surroundings of a remote antiquity still surviving is the church of the Latins—Santa Maria Latina.

The common history of its origin is to the effect that about the year 800 a Benedictine monastery was founded on the south-east side of the Anastasis, and remained in existence on that site until the coming of the first Crusaders under Godfrey de Bouillon. Gibbon in his turgid manner describes how

> "the zeal of the Christian sects was embittered by hatred and revenge; and in the kingdom of a suffering Messiah, who had pardoned His enemies, they aspired to command and persecute their spiritual brethren. The pre-eminence was asserted by the spirit and number of the Franks; and the greatness of Charlemagne protected both the Latin pilgrims and the Catholics of the East. Haroun al Raschid, the greatest of the Abassides, esteemed in his Christian brother a similar supremacy of genius and power: their friendship was cemented by a frequent intercourse of gifts and embassies; and the Caliph, without resigning the substantial dominion, presented the emperor with the keys of the Holy Sepulchre, and perhaps of the city of Jerusalem."

* This church is, to a certain extent perhaps, represented at the present day by the "Chapel of the Apparition," see pp. 726, 812.

The last paragraph is in the Gibbonian style, but as an historical statement is somewhat doubtful, at least, as regards an annual fair on Mount Calvary :—

"In the decline of the Carlovingian monarchy, the republic of Amalfi promoted the interests of trade and religion in the East. Her vessels transported the Latin pilgrims to the courts of Egypt and Palestine, and deserved by their useful imports the favour and alliance of the Fatimite Caliphs: an annual fair was instituted on Mount Calvary; and the Italian merchants founded the convent and hospital of St. John of Jerusalem, the cradle of the monastic and military order which has since reigned in the isles of Rhodes and of Malta." *

This page of history assumes, perhaps, a rather more interesting form under the pen of the Abbé Vertot ("History of the Knights of Malta," English translation, p. 7 : London, 1728) :—

"Another modern writer, learned in our antiquities, in the thirty-seventh book of the annals of his order, tells us of one Bernard, a French monk who lived in A.D. 870, and who in his account of a voyage to Jerusalem relates that he found there an hospital for the Latins, and that in the same house was a library, collected by the care and at the expence of the emperor Charlemagne. †

"But after the death of the caliph Aaron and his first successors, as those of Charlemagne did not come up to him either in power or reputation, the French lost the regard that had been formerly paid them in Palestine. They were no longer allowed to have any house of entertainment in Jerusalem; . . . differences in point of discipline having, in a manner, put an end to all union between the Greek and Latin Churches, our European Christians were scarce less odious to the Greeks than they were to the Arabians and Saracens of the East.

"In the middle of the eleventh century, some Italian merchants, who had experienced the inhumanity of both the one and the other, undertook to provide an asylum for the European pilgrims, in the very city of Jerusalem, where they might have nothing to fear from the false zeal of the Mahometans, or the enmity and aversion of the schismatical Greeks. These pious merchants were of Amalphy, a city in the kingdom of Naples, but at that time subject to the Greek emperors of Constantinople.

"The governor, by the order of the caliph Monstaser-Billah, assigned them a piece of ground, on which they built a chapel, and dedicated it to the Blessed Virgin, by the name of S. Mary ad Latinos, to distinguish it from the churches where divine service was celebrated according to the Greek ritual: some monks of the Benedictine order officiated in it. Near their convent they built two houses of entertainment for the reception of pilgrims of both sexes, whether in health or sickness, which was the chief view in this foundation; and each house had afterwards a chapel in it, the one dedicated to St. John the Almoner, and the other to St. Magdalen.

"Some lay persons from Europe, full of zeal and charity, renouncing the thought of returning into their own country, devoted themselves in this religious house to the service of the poor and pilgrims, and were subsisted by the monks above mentioned; and the merchants of Amalphy, out of the alms which they collected in Italy and either brought or sent regularly every year to the Holy Land, supplied the wants of the pilgrims or sick.

"Yet this pious and useful foundation had like to have been ruined in its very infancy, and it had hardly subsisted fifteen years when the Turcomans conquered Palestine, surprised the city of Jerusalem, and cut the caliph of Egypt's garrison to pieces. The inhabitants and Christians scarce met with a better fate: numbers of them were butchered; the hospital of St. John was plundered, and these barbarians, fierce and cruel in their nature, would have destroyed the Holy Sepulchre had not their avarice restrained their impiety. The fear of losing the revenues raised upon the pilgrims of the West preserved the tomb of our Saviour. 'Soli etiam dominici sepulcri templo, ejusque cultoribus christianis parcebant propter tributa quæ ex oblatione fidelium assidue eis fideliterque solvebantur, una cum ecclesia Sanctæ Mariæ ad Latinos quæ etiam tributaria erat.'—*Alb. Aquensis*, i. 6."

Amongst the references to St. Mary the Latin in writers on mediæval history may be quoted Baronius, who under the year 800 (Eginhard, 799) speaks of the Patriarch George sending monks of Palestine to the court at Aix begging aid and protection for the Christians of Jerusalem. Baluse (*Capitularies* I., p. 473) gives the capitularies established by the Western Emperors for regulating the alms collected for the support of the Convent and Hospice of St. Mary the Latin and for the benefit of Latin Christians in the Holy Land (Eginhard : *Vita Caroli*, c. 27).

In Muratori, *Ann.* III., p. 577, will be found an interesting account of the Carlovingian policy with regard to "Outremer," and of the taxation imposed on the Holy Roman Empire by

* Gibbon's *History of the Crusades*, Chandos Library edit., p. 361.

† "De Emmaus pervenimus ad S. Civitatem Jerusalem et recepti sumus in hospitale gloriosissimi imperatoris Karoli in quo suscipiuntur omnes qui causa devotionis illum adeunt locum, lingua loquentes Romana. Cui adjacet ecclesia in honore S. Mariæ, nobilissimam habent bibliothecam studio prædicti imperatoris cum duodecim mansionibus agro vineis et orto in valle Josophat."

Louis le Debonair for the benefit of the Jerusalem Hospice. The famous hospice on Mont Cenis is also said to have been founded, partly for the purpose of facilitating the passage across the Alps in connection with pilgrimages to Jerusalem, by the Emperor Louis II. (See also "The Monk of S. Gall." II., c. 14.)

During the first years of the twelfth century the Convent of St. Mary the Latin continues to be mentioned. In the "Assizes of Jerusalem," II., section 4, Chartes 51, the Benedictine Abbey of St. Mary returns fifty sergeants to the Royal service. The oath of fealty from the Abbot to the Patriarch is given, and the right of the Abbot to wear mitre, cross, and ring is mentioned. John of Wurzburg mentions that the relic of St. Philip's head was preserved in the chapel of the convent.

The convent is apparently referred to under the names of "Sainte Marie la Latine et Marie Cleophè." "La tirerent leur chevaux," by William of Tyre in the middle of the thirteenth century, and Philip Musquet, in his rhymed chronicle of 1241, evidently refers to the chapel as

"U Madame Sainte Marie
La Mere Dieu s'estoit marie
Et la Marie Cleophé
Od la Marie Salomè."

It is mentioned in *Les Pelerinages por aller en Jherusalem*, c. 1250:—

"Par devers midi pres d'iluec (S. Sep.) est l'yglise de Nostre Dame de la Latine, la premier yglise qui onques fust des Latines en Jherusalem et por ce a nom la Latine. Et est de moines noires."

The earliest plan of the Holy Sites—the famous drawing attributed to the French bishop Arculf—shows the church of St. Mary Latin as evidently forming a component part of the group of buildings; his description also implies that the square church of St. Mary adjoined the round church of the Anastasis. But in the later plans of Jerusalem, of which many versions remain from the thirteenth and later centuries, the "Ecclesia Latina" is clearly enough marked on the opposite side of the street known as "Vicus ad Templum Domini," or "Rue des Palmiers."

From the foregoing it is evident that the church founded by the Emperor Charlemagne under such romantic circumstances was removed from the site which it first occupied in front of the south entrance to the Holy Sepulchre to some distance further off in the same direction. This removal must have taken place in connection with the building of the new south transept of the Crusaders' church in about 1130.

The church known traditionally as Santa Maria Maggiore, the ruins of which, after forming a part of the "Muristan" of Jerusalem, and subsequently a tannery, have in recent years been rebuilt as the German Lutheran Church of the Redeemer, would apparently be the Santa Maria Latina of the twelfth and thirteenth centuries. The position of this building corresponds as far as may be with the mediæval plans and descriptions, and its ruined precincts still contain the cloister and a few chambers of a small religious house. The surrounding premises towards the south-west constituted the hospice accommodation, and seem to have been contiguous with the two other hospices mentioned in the chronicles as St. John and St. Mary Magdalen or St. Mary the Less.

Of the church rebuilt by the Germans in 1896 nothing now remains *in situ*, but some arch stones have been re-used in the principal entrance which have the usual character of French transitional sculpture of the period. They represent the signs of the Zodiac.

De Vogüé in his plan of the Holy Sepulchre Church (*Les Eglises de la Terre Sainte*) has guessed at the probable position of Charlemagne's church, but at the same time has shown a singular want of perception in failing to recognise its actual situation by the apse which still survives on the east side of the present parvis.

This apse is sufficiently evident to the most casual passer-by. Its wide pointed arch is supported on two capitals of the usual Byzantine style of carving, as far as can be seen, embedded as they are within the wall which has been built across the apse and which has converted the interior, covered by its semi-dome, into a small chapel now in the occupation of the Armenians. The outline of this apse arch can be easily seen in the photograph (fig. 30).



Fig. 30.—The Apse of St. Mary Latin, now used as an Armenian Chapel, in the parvis of the Holy Sepulchre.

The flight of steps which still serves as a means of communication between the modern Greek convent of Constantine and the parvis is evidently in the same position as the approach of a similar kind shown upon the plan of Arculf as a walled or inclosed passage (see fig. 31). The date of the buildings forming three chapels on the west side of the parvis is very obscure. These chapels are evidently in the position described by Sæwulf, but at the same time their architectural character appears of a later date. It seems possible they may have been built or rebuilt at the period when St. Mary Latin was pulled down and the new church of St. Mary Major took its place.

It seems more than probable that the three chapels described by Sæwulf as forming a continuous line or perspective view with the rotunda of the Anastasis must have at one time formed the western end of St. Mary Latin of the ninth century, because they are described as being in existence long before the destruction of St. Mary Latin. We may perhaps therefore consider that the east end, and possibly the west end, of this ancient church survive, whilst the central portion or nave has quite disappeared, and its site is now occupied by the open *parvis*. It will be noticed that the three chapels in their rebuilt form have very much the appearance of a nave with side aisles, the centre one being the widest.

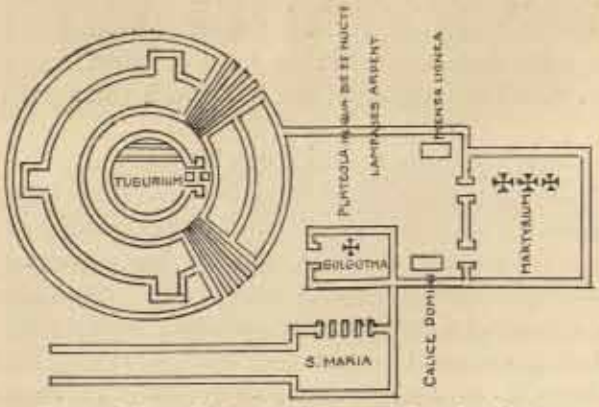


Fig. 31.—Plan of Bishop Arculf, c. 700. Reproduced in the MSS. of Bede, "Hist. Eccl.," and elsewhere.

The apse of this ancient church—now turned into a small shrine of the Armenians—is much altered internally by arrangements intended to give it a more usual parallelogram form, but the semicircular plan and the pointed semi-dome which covers it are still easily detected.

The Benedictine Abbey of the ninth century would presumably have occupied the area of the small modern Convent of Abraham, part of which, until within a few years back, was the site of a tannery, and at one time seems to have been built as a bazaar. This bazaar would probably have come into existence at a time when the Benedictines were transferring their premises to the other side of the main road called "Rue des Palmiers," and when the Augustinians were enlarging their boundaries around the grand new convent of the Crusading epoch.

The site of the bazaar is now completely modernised, with new European shops and the new Russian hospice. Within the latter, close to the rock-cut steps supposed to be those of the

ancient pretorium, is a singular and quite inexplicable fragment of an arched porch or doorway to some building of presumably Byzantine age. Nothing has been discovered throwing light upon this fragment.

THE "BESTIARY" OF THE SOUTH FAÇADE.

Perhaps certain processional regulations for the entrance and exit of pilgrims—referred to by Edrisi in 1154—may account for the very marked difference in the decorative details of the twin portals of the great façade, differences which it is otherwise difficult to account for.

The tympanum on the east side has at one time been filled with ordinary mosaic, the cement for which still adheres to the walling and also to the inner order of the arch. The western tympanum seems to have been treated differently—in an incised pattern of squares and hexagons cut on the stone surface.



FIG. 32.—The Great Façade: Decorative Details of Lintel over the Eastern Portal.

The apparent lintels supporting these tympana are in reality mere slabs of fine white stone or marble carved on the outer face and secured by iron clamps to flat arches behind. This Italian method of construction is ornamented with sculpture of very Provençal character.

The western lintel slab is carved with the "Resurrection of Lazarus," the "Entry of Christ into Jerusalem," and the "Last Supper." The first two subjects are treated in two scenes each, the last occupies a small corner of the panel on the right.

The lintel of the eastern or right-hand door is treated in an altogether different and very remarkable manner. An interlacing scroll of acanthus foliage of Byzantine type encloses small figures of naked men, a centaur with an unstrung bow, and a winged bird-like figure with a woman's head. The whole composition is a mystical curiosity of the period, and the workmanship is of the very finest, worthy of the best Italian school, and superior perhaps to its companion panel.

In the mediæval "Bestiary" books, of which this carving evidently forms an illustration, a centaur represents pride and arrogance, the bird with a woman's face and dragon's feet is a syren

or harpy, doves suggest the simplicity of the Holy Spirit, and the horned bird or "Calandre" figures Jesus Christ. The scroll evidently represents the "peredixion" or tree of life. In the present case the human figures are perhaps represented as protected by the shadow of the "peredixion," whilst fantastic birds and monsters occupying the lower part of the composition are evidently watching for their prey. The animation of the figures and the refinement of workmanship of this twelfth-century sculpture are very remarkable.

The principal object of this brief account of the Holy Sepulchre Church has been to summarise in a convenient form the chief points in its long and eventful history; and at the same time to give some idea of the very important architectural character of such portions of the monument as still survive intact at the present day.

Not only is the building, with its complicated surroundings and modern circumstances, of the most intense interest to the Christian traveller, the historian, and the mere archæological student, to whom its antiquity and vicissitudes must ever have an attraction second to no other monument of the kind in the world; but to the architect it also possesses an interest of a special kind. Its singular position in one of the most inaccessible and uninviting regions of the earth, to which few if any architectural students are likely to be attracted on summer holidays, has hitherto prevented any great recognition of its interest as the probably most remarkable monument of twelfth-century art. Yet, as has been pointed out, this once splendid building possesses features in its general design, and even in its somewhat remarkable details, worthy of comparison with the noblest European monuments of the early middle ages.

Here in Jerusalem we see the Europeans of widely different types—both in habits and artistic ideals—but united in one faith, raising the most imposing monument of their period, under circumstances and difficulties unparalleled either before or since. Such a monument calls for special study, and has an interest which is quite unique both for architects and archæologists.

The scanty traces of an *opus magnum* of an earlier Christianity are also worthy of architectural study, although, unhappily, they afford more food for conjecture than for actual comparison, and such mutilated fragments as survive admit of varied interpretations.

APPENDIX.

Chronology of Events and Bibliography.

	A.D.
The Crucifixion. According to the ordinary computation	33
The Gospel of S. Luke [Smith's *Dict. of Bible*, p. 712]	64
Persecution of the Christians and Martyrdom of S. James [Smith, p. 1010]	„
Siege of Jerusalem by Titus	70
Jerusalem disappears from history.	
Colonia Aelia Capitolina, founded by Hadrian	136
Coins with a representation of a temple of Astarte and the inscription C. A. C.	„
Origen refers to "Golgotha" [Migne, *Pat. Gr.* xiii. col. 1777]	185–253
Chronicon Paschale [P.P.T.S.]	270
Aristeas and Hecataeus of Abdera [P.P.T.S., uncert. date]	?
Eusebii et Hieronymi Onomasticon Urbium et Locorum SS. [var. editions]	330–400
The New Jerusalem built by Constantine.	
The Martyrion consecrated in the presence of Eusebius, Bishop of Cæsarea	335
Catechetical Lectures of S. Cyril [var. edit.]	350
Itinerarium Burdigalense [Bordeaux Pilgrim, P.P.T.S.]	?
Itinerarium Antonini Augusti [Reland, p. 416]	?
Pilgrimage of Paula described by S. Jerome [P.P.T.S.]	382
Letter of Paula and Eustochium to Marcella [P.P.T.S.]	„
Peregrinatio ad Loca Sancta S. Silviæ Aquitanæ. Discovered by Sig. G. Gamurrini at Arezzo, 1883. Edited in 1887, and published by the Palestine Societies of England, Russia, and Germany	385
S. Eucherii Epitome de Locis Sanctis aliquibus [P.P.T.S.]	440
Jerusalem made an independent patriarchate	458
Justinian's buildings in Jerusalem	529
Breviarius de Hierosolyma [Anon.]	530
Theodosius. De Terra Sancta [L'O. L. Geneva, 1877]	„

NOTE.—Author may have been an architect sent by Justinian to build Ch. of S. Mary [P.E.F., vol. i. p. 19].

Procopius of Cæsarea. De Ædificiis [P.P.T.S.] 555
Itinerarium B. Antonini Placentini [P.P.T.S.] 600
Jerusalem destroyed by Persians and Jews. The buildings of the Holy Sepulchre burnt 614
Holy Sepulchre restored by Modestus and John Eleemon, and triumphal entry of Heraclius (Byz. Emp.) into Jerusalem . 628
First Mohammedan siege of Jerusalem, and conquest by the Khalif Omar . . . 637
Sophronios, Patriarch of Jerusalem. Anacreontics [P.P.T.S.] . . . . . "
Adamnus [ex Arculfo] de Locis Sanctis [P.P.T.S.] 697
Numerous sketch plans occur in recensions.
S. Willibaldi Vita seu Hodœporicon [P.P.T.S.] 727
Charlemagne sends ambassadors to the Khalif and establishes his protection over the Holy Sites 800
Itinerarium Bernardi Monachi [P.P.T.S.] . 870
Eutychius. Annals [Migne, *Pat. Gr.* iii.] . 930
Jerusalem occupied by the Fatimite Khalif of Egypt 969
Buildings of the Holy Sepulchre demolished by the Khalif El Hakem 1008
Mukaddasi. Description of Syria [P.P.T.S.] "
Pilgrimage of Robert, Duke of Normandy . 1035
" Lietbert of Cambray . . 1054
" the German Bishops . . 1065
Jerusalem destroyed by the Kharismians . 1077

NOTE.—This event led ultimately to the "Crusades."

The Crusaders take possession of Jerusalem 1099
Pierre Tudebove. Account of First Crusade referred to by De Vogüé in *Les Eglises de la Terre Sainte* 1100
Sæwulfi Relatio de Peregrinatione [P.P.T.S.] 1102
Fulcherii Carnotensis Gesta Peregrinationis in Bongar's *Gesta Dei per Francos*, p. 381 1124
Daniel (Russian Abbot). Journey to Holy Land [P.P.T.S.] 1125
El Edrisi. Geography of Syria [P.P.T.S.] . 1150
De Situ Urbis Jerusalem, &c. [Anon.]. At end of De Vogüé's *Les Eglises de la Terre Sainte* 1151

The building of the Holy Sepulchre church as we see it at the present day.

John of Wurzburg's description of Holy Land [P.P.T.S.] 1170
Theodoricus. De Locis Sanctis [P.P.T.S.] . 1172
William of Tyre's History [var. edit.] . . 1185
"En quel estat la citez de Jherusalem et li siens Lieu estoient" (Anon.) [P.P.T.S.] . 1190
Jerusalem occupied by the Moslems . . 1187
Jerusalem ceded to the Christians by the treaty with Frederick II. 1229
David of Kerak captures the city and demolishes the walls 1239
Jerusalem retaken by the Christians . . 1243
Kharismian tribes attack the city, massacre the priests and monks within the Holy Sepulchre buildings, and on their withdrawal the Moslems take possession of Jerusalem under the Khalif of Egypt . 1244

During the middle ages, and since the final Moslem occupation of Jerusalem, innumerable accounts of travels, pilgrimages, &c., have been written, of which the most important are the following:—

Brocardi (Burchardi) Locorum Terræ Sanctæ descriptio. (Evidently a pilgrim's guide in MS. form, several recensions exist) [P.P.T.S.] 1283
Guilielmi de Baldensel Hodœporicon. [Thesau. Mon. Basnage, p. 331]. This author is singular as being the first to doubt the authenticity of the Holy Sepulchre 1336
Felix Faber "Evagatorium" [P.P.T.S.] . 1484

The following early printed books on Jerusalem also contain valuable information on the Church of the Holy Sepulchre, in the form of more or less accurate drawings and plans:—

Breydenbach's Pilgrimage, with illustrations by Rewick 1483
Padre Noe dell' ordine di S. Francesco—Viaggio da Venetia al S. Sepolcro [var. edit.] Earliest type of woodcuts . . 1500
Bonifacius a Ragusio. Liber de perenni cultu Terræ Sanctæ. Ven. 1552
Jean Zuallart (Giovanni Zuallardo) Il devotissimo viaggio di Gerusalemme [var. edit. and languages]. Early engravings . 1587
Bernardo Amico. Trattato delle piante e immagine de' sacri edifizi di Terra Santa Roma. Valuable drawings of the period 1609
George Sandys' Travailes, containing a History of the Turkish Empire, &c., with fifty graven Maps and Figures. London 1615
Cornelius de Bruyn (le Brun) Reyzen door der Levant, &c. Delft. Interesting illustrations 1672

Numerous books of travels were published during the XVIIIth century but of little individual interest, and when illustrations are attempted they are of a deplorable character. In 1741, Jonas Korte, a German bookseller, visited Jerusalem and started a theory as to the genuineness of the "Tomb of Christ" which has induced a certain feeling of partisanship amongst Christians ever since.

Burning of the Holy Sepulchre Church . 1808
Holy Land occupied by Mohammed Ali Pasha of Egypt 1832
Holy Land becomes a vilayet of the Turkish Empire and so remains 1840

During the XIXth century a continual publication of accounts of tours and pilgrimages, explorations, identifications, &c., in the Holy Land in all languages, and with the most varied objects in view, renders any attempt at a comprehensive bibliography almost impossible. Setting aside works of a Missionary character, and those written in support of some new and remarkable identifications of Holy Sites, the more serious and important modern contributions to the history of the Holy Sepulchre are the following:—

Edward Robinson, D.D., Biblical Researches, New York 1838
Rev. George Williams, "The Holy City," London 1845
Prof. R. Willis, F.R.S., republishes the above with additions of an architectural character. Plan of the Holy Sepulchre by Scoles . 1849

Salzmann, a German photographer, visits Jerusalem and publishes a collection of views of the Holy Sepulchre [amongst the first productions of the new art ever published]. Paris. Large folio . . 1854
M. de Vogüé, "Les Eglises de la Terre Sainte," Paris 1860
Ordnance Survey conducted by Sir Henry James and Col. Ch. Wilson at the expense of Lady Burdett-Coutts. P.E.F. founded 1864
*Col. Warren's Excavations in Jerusalem [published by P.E.F. 1884] . . . 1867
Palestine Exploration Quarterly Statement first published 1869
Publications of L'Orient Latin [mediæval history] 1870
Building of the great iron dome over the Holy Sepulchre 1870
American Palestine Exploration Society instituted 1871
Clearing of portion of the Muristan by German Government 1872
Publications of the German Palestine Society commence 1878
The large 4to. Survey of Palestine, with supplements, commenced 1881
This is intended to contain serious results of investigations by the Society extracted from the Quarterly Statements.
Discovery of the remains of Constantine's Basilica by the Russians on their property to the east of the Holy Sepulchre . . 1887

*Colonel Warren examined the remains of the Basilica, *see* Plate XX. Ordnance Survey.

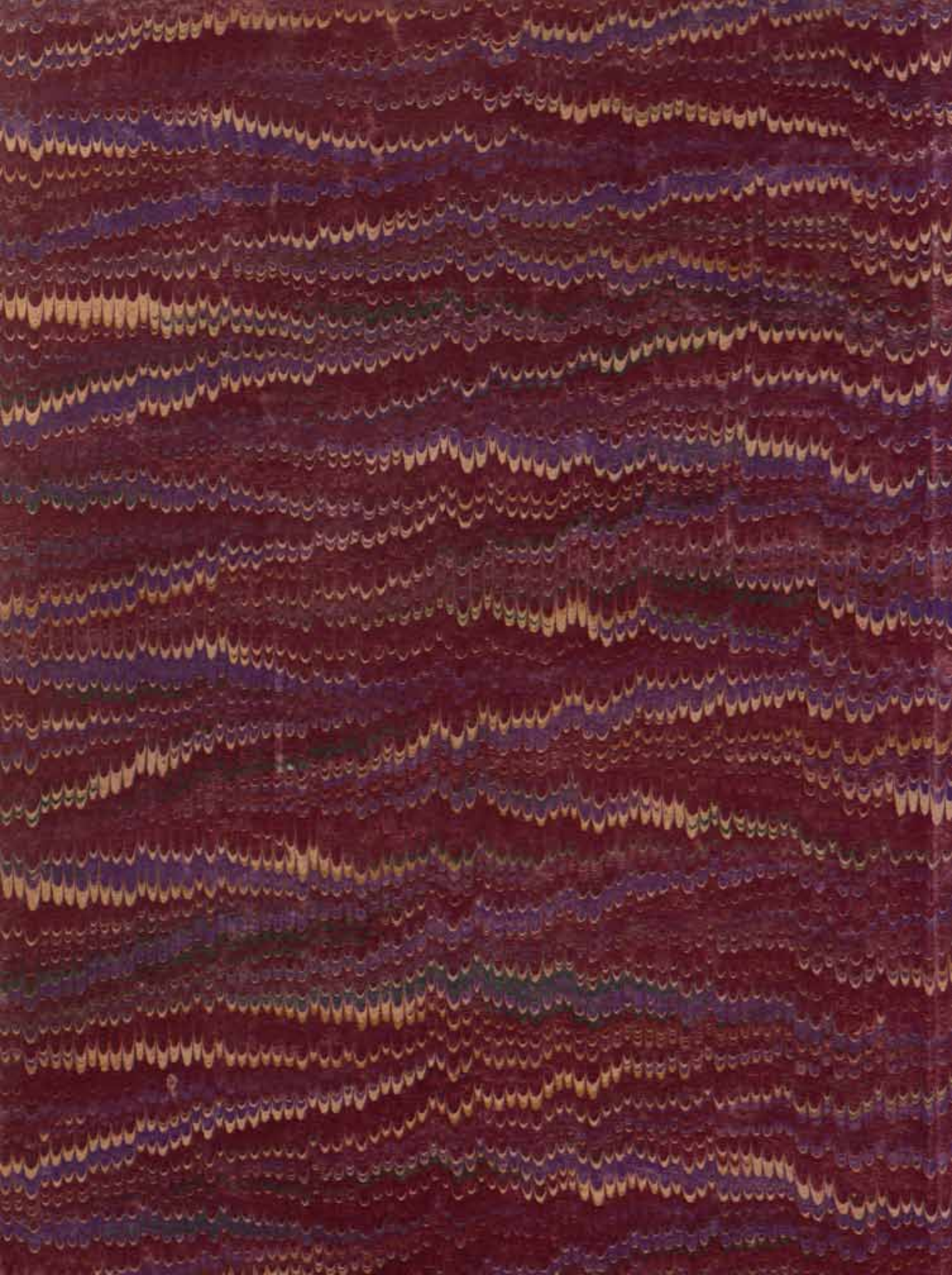
Hayter Lewis, F.S.A. "Holy Places of Jerusalem" 1888
Revue Biblique de l'école S. Etienne, Jerusalem, commenced 1892
Bulletin of the Russian Palestine Society commences 1894
G. Jeffery. "The Buildings of the Holy Sepulchre," Florence [privately printed]. This contains the first reference to the mosaic in S. Pudenziana, Rome, as a probable representation 1894
Discovery of the Madeba mosaic . . . 1897
Rev. A. Headlam. Review of the above in "Quarterly." July 1899
Arch. C. Dickie. "Some Early Christian Churches in Palestine." R.I.B.A. Journal 1899
English Palestine Exploration Society appears to accept the idea that the mosaic of S. Pudenziana represents the IVth century buildings on the Holy Sites. See Sir Chas. Wilson in P.E.F.Q.S., p. 149 . 1902
Arch. C. Dickie. "Masonry Remains around the Church of the Holy Sepulchre." P.E.F.Q.S., p. 298 1908

In 1865 the Palestine Exploration Society of London commissioned Col. C. Wilson to make a plan of the Holy Sepulchre Church. This plan agrees in a general way with the older plan made by Scoles for Williams' "Holy City." It is more accurate and detailed than the older work, and with the plans made by Herr Schick at about the same period forms the basis of most modern investigations of the Holy Site.



FIG. 33.—The Tomb in the Rotunda.

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